

PRESENT-DAY STANDARDS FOR TEACHING



FITZPATRICK



Gert and Honie

Gertrude Nykstra

Uniona Myklebust

Present-Day Standards For Teaching

By

F. BURKE FITZPATRICK

Professor of Education and Director of the
Extension Department, State Teachers
College, East Radford, Virginia

F. A. OWEN PUBLISHING COMPANY
DANSVILLE, N. Y.

COPYRIGHT, 1926

F. A. OWEN PUBLISHING COMPANY

Present-Day Standards for Teaching

PREFACE

This book attempts to analyze present-day teaching, in order to determine the standards recognized as valid in current educational practice, and to point out the relation between these standards and certain pedagogical methods. An underlying aim of the author has been to aid in shifting emphasis from teacher-activity to pupil-activity. He has also endeavored to encourage scientific measurement of classroom results and critical rating of the teacher's qualifications.

As far as possible, every standard chosen has been amply illustrated and carefully made concrete. The material used has grown out of the author's experience in supervising both rural and city schools, in teaching and supervising teacher-training classes in the Radford State Teachers College, and in working with the State Committee in building the present Virginia State Course of Study. The illustrations, lesson plans, projects, and problems included have been tested and their value proved.

Since the book deals with standards common to all teaching, it is hoped that it will be helpful to teachers of all grades in both city and rural schools, to supervisors, and to superintendents. The author has kept in mind, at all times, that the problems of the recitation belong alike to teacher and supervisor, and to the superintendent when he has supervisory duties. It is hoped also that *Present-Day Standards for Teaching*

may prove a satisfactory text for classes in Normal Schools and Teachers Colleges, for State Teachers' Reading Courses, and for Teachers' Reading Clubs.

Through the courtesy of the College of Education, University of Chicago, the author has been permitted to publish several schemes for grading used in that institution. Dr. Joseph E. Avent of the University of Tennessee has allowed the inclusion of certain questions and answers relating to discipline, prepared by him originally for a Radford bulletin. The Lesson Plans used in Chapter XVII were prepared by various teachers, and a number of them were used in the Virginia State Course of Study. Houghton Mifflin Company kindly granted the right to reprint from Miss Earhart's *Types of Teaching* the "Suggestions for Lesson Plans" presented on page 166.

The author wishes to acknowledge his indebtedness to the following Virginia educational leaders for valuable suggestions and criticisms: Dr. J. P. McConnell, President of the Radford State Teachers College; State Superintendent Harris Hart; Miss Rachel E. Gregg, State Supervisor of Teacher-Training; Dr. John W. Wayland, Professor of History in the Harrisonburg State Teachers College. He has been aided in many ways by his associates of the Radford faculty, by his wife, and by others to whom gratitude is due.

EAST RADFORD, VIRGINIA

F. B. F.

CONTENTS

At the end of each chapter are Questions and References.

CHAPTER I

METHODS OF EVALUATING EFFICIENCY IN TEACHING . . . 9

Judgment Based on Observation, 9. — Judgment Based on Analysis, 11. — Judgment Based on Measured Results, 13.

CHAPTER II

SOME SPECIFIC STANDARDS FOR EVALUATING THE RECITATION 17

Standards, 18. — Ranking of Standards, 19. — Additional Standards, 20. — Criticism, 21.

CHAPTER III

PUPIL-ACTIVITY VERSUS TEACHER-ACTIVITY 24

The Proper Balance, 24. — The Teacher as the Center of Interest, 24. — The Pupil as the Center of Interest, 25. — The Old Adage, 26. — How to Shift Teacher-Activity to Pupil-Activity, 27.

CHAPTER IV

CLEARNESS AND DEFINITENESS OF PURPOSE AS A STANDARD 32

Type Lesson, 33. — Compositions, 36. — Explanation of Success, 37.

CHAPTER V

VALIDITY OF SUBJECT-MATTER AS A STANDARD 40

Selecting a Topic, 40. — The Recitation, 42. — Compositions, 44. — The Other Side, 45. — Explanation of Success, 46.

CHAPTER VI

ORGANIZATION OF SUBJECT-MATTER—THE PROJECT METHOD 49

Nature and Aims of a Project, 49. — The Characteristics of a Project, 51. — The Validity of Subject-Matter, 52. — Malaria as a Topic for Oral and Written Composition, 54. — Biography as a Topic for Oral and Written Composition, 57. — Explanation of Success, 60.

CHAPTER VII

ORGANIZATION OF SUBJECT-MATTER (CONTINUED)—THE PROBLEM METHOD 64

Technique of Problem-Solving, 65. — Example of Problem-Solving, 66. — The Problem Method Applied to Geography, 67.

CHAPTER VIII

ORGANIZATION OF SUBJECT-MATTER (CONTINUED)—THE PROBLEM METHOD APPLIED TO HISTORY 71

A Topic Method Response, 71. — A Problem Method Response, 72. — Other Responses, 73. — Another Illustration, 74. — Good and Poor Responses, 76. — Problems of History, 77.

CHAPTER IX

EFFECTIVENESS OF QUESTIONING—ITS VALUE AS A STANDARD 78

"False or True" Tests, 78. — Method of Grading, 79. — Objective Questions, 80. — Values, 81. — "Yes" and "No" Questions, 82. — Thought Ques-

tions, 83. — Characteristics of Thought Questions, 84. — Prerequisites of Good Questioning, 85. — Excellences in Questioning, 90. — Warnings, 90.

CHAPTER X

MEASURED RESULTS 92

Use of Standard Tests, 92. — Spelling Tests, 93. — The Lynchburg Spelling Test, 94. — Interpretation, 96. — Lynchburg's Reading Test, 98. — Simple Distribution, 99. — Individual Interpretation, 99. — Median, 101. — Ranking Scores, 102. — Quartile Points, 103. — Frequency Distributions, 103. — Quartiles in a Frequency Distribution, 106. — Use of Graphs, 106. — Dr. Judd's Estimate, 108.

CHAPTER XI

PRINCIPLES OF LESSON ASSIGNMENT WITH ILLUSTRATIONS 110

Definition, 111. — Characteristics of an Effective Assignment, 113. — Form of the Assignment, 113. — Motivation of the Assignment, 114. — Illustrations of Assignments, 114.

CHAPTER XII

OTHER STANDARDS 118

(PREPARATION OF PUPILS; CARE OF ROUTINE; MENTAL ALERTNESS; SOCIAL ACTIVITIES; FIXING DEFINITE RESULTS)

Social Recitation, 119. — Another Example, 120. Characteristics of a Socialized Recitation, 121.

CHAPTER XIII

HABITS OF STUDY 123

Nature of Study, 123. — Developing Study-Habits, 125. — Problem Discovery, 126. — Municipal Problem, 127. — Boy-Scout Movement, 129. — Project: Excursion to a Waterfall, 130.

CHAPTER XIV

MAINTAINING ORDER AND DISCIPLINE 134

School Discipline, 134. — Questions and Answers, 138.

CHAPTER XV

SELF-IMPROVEMENT BY SELF-ANALYSIS 145

Explanation of Scheme for Evaluating the Recitation, 146. — Self-Rating, 147. — Rating by Others, 148. — Observation of Instruction, 148. — Schemes, 149. — Practices of Superior Teachers, 155. — Things to Avoid in Teaching, 156. — Criticism of Recitations, 157.

CHAPTER XVI

STANDARDS FOR LESSON PLANNING 161

Definition, 161. — Value, 161. — Elements of Good Lesson Planning, 162. — Lesson Plan Form, 165. — Suggestions for Lesson Plans, 166.

CHAPTER XVII

ILLUSTRATIONS OF LESSON PLANS 169

No. I, Kindness, 169. — No. II, Whittier's "The Barefoot Boy," 172. — No. III, Stevenson's "The Swing," 178. — No. IV, Lincoln's Address at Gettysburg, 179. — No. V, Spelling, 182. — No. VI, Lanier's "The Song of the Chattahoochee," 183. — No. VII, Spelling, 185. — No. VIII, Lowell's "The Vision of Sir Launfal," 187. — No. IX, Hogg's "A Boy's Song," 191. — No. X, Multiplication, 193. — Lesson Description, Language, 194.

APPENDIX

SCHEDULES FOR ONE-, TWO-, AND THREE-TEACHER SCHOOLS 196

INDEX

INDEX 204

Present-Day Standards for Teaching

CHAPTER I

Methods of Evaluating Efficiency in Teaching

There are many ways of judging the efficiency of teaching. Some superintendents take the judgment of the community as their guide; others follow a more or less scientific method of procedure. The three most common methods of procedure depend upon Judgment Based on Observation, Judgment Based on Analysis, and Judgment Based on Measured Results.

JUDGMENT BASED ON OBSERVATION

This method was the common practice until a decade or two ago. We still have need for it, but should not depend on it too largely. In using this method the superintendent or supervisor looks on while the recitation is being conducted and then pronounces the teaching as satisfactory or unsatisfactory. He doesn't undertake to analyze the process or to measure results. He doesn't undertake to say why it is good or bad. He bases his judgment on what he sees. The procedure is subjective, sometimes personal, and frequently unreliable. The superintendent's estimate is valuable, especially if it is based on a sufficient number of observations or cases, but still it is not safe to rely upon it altogether. It needs to be supplemented

by further evidence of a sort independent of personal opinion.

On one occasion the writer, as superintendent of schools, was visiting classes with a trustee. One of the teachers observed became confused and for this reason made a very poor showing. She was easily an average teacher. From this one observation, however, the trustee formed an unfavorable opinion of her ability as a teacher. This case simply illustrates the danger of procedure that is based wholly on observation.

An up-to-date physician is not satisfied with being able to tell a sick man from a well man. He refuses to treat the case blindly. He finds out to what extent he is sick, tests his heart, takes his temperature, studies the history of the case, the temperament of the individual, and then treats the patient in the light of these facts.

In education we should proceed somewhat in the same way; we should study the case, find out the facts, and then offer the remedies.

We should put such questions as these to ourselves: Why does this boy fail? Why does he fail in this particular subject? Why is his conduct so undesirable?

In answering these questions as to any individual we should know the history of the case, his family connection, his associates; we should also study the individual's general school record as to individual subjects, as to his likes and dislikes; consider his mental age, his achievement age, and his intelligence quotient; find out how he is estimated by his teachers and by classmates and associates. With such facts before us we can proceed to treat the case intelligently and scientifically.

JUDGMENT BASED ON ANALYSIS

This is a great improvement on the old method of judging instruction. In using it one must have a set of definite standards with which to measure the different factors that enter into the process.

When Dr. Frank McMurry was asked to judge the quality of instruction in the New York City schools, the first thing he did was to select the standards to be used in the survey. Nothing could be done until this matter was settled. After careful consideration he and his co-workers finally selected four important phases of everyday life as tests. Others could have been added, but these, according to Dr. McMurry, were sufficient. I am giving them just as I find them in Chapter II of his excellent book *Elementary School Standards*:

- "1. Motive on the part of the pupils.
- "2. Consideration of values by pupils.
- "3. Attention to organization by pupils.
- "4. Initiative by pupils."

As the investigators went from school to school, they applied these tests to the teaching they saw. After observing a recitation, for instance, they put such questions as the following to themselves: Did the recitation develop in the pupils the right purpose, the right attitudes, the proper desires and ideals? Did the teacher give opportunity for weighing values, forming judgments, drawing conclusions and reaching generalizations? Were there evidences of training in orderly thinking as shown by the orderly arrangement of material? Were there evidences of initiative, self-reliance, independence, and originality?

Dr. H. C. Morrison, of Chicago University, has three simple formulas he uses as standards for judg-

ing the efficiency of teaching. In his first formula, "efficiency" equals the number of pupils attentive divided by the total number of pupils in class. This gives a pretty accurate per cent of attention and is alone a very satisfactory measure of efficiency in classroom instruction. For instance, if a superintendent finds forty pupils in class, twenty of whom are attentive, he knows that instruction is about 50% efficient. On the other hand, if he finds forty pupils in class, all of whom are attentive, mentally alert and responsive, he knows that the instruction is of a high order.

In his second formula he makes "participation" equal the number of pupils taking an active part in the classroom work divided by the total number of pupils in class. This formula is used for manual training, domestic science, laboratory work, and is a fairly accurate measure for participation.

His third formula divides the number of pupils who recite satisfactorily by the number of pupils having a chance to recite. This is called by Dr. Morrison a measure of results.

Of course, the use of these three formulas could not be strictly accurate, but they are objective in part and are sufficiently reliable for practical purposes. They also illustrate the present tendency toward objective standards in evaluating instruction. To-day we are not willing to depend upon mere judgment or subjective opinion.

Joseph E. Avent, Professor of Education in the University of Tennessee, has his student-teachers do their observation work with these three queries in mind:

1. What was done.
2. What was done well.
3. What could have been done better.

After each demonstration lesson he requires each pupil to write out a careful criticism under the above headings.

Dr. W. S. Gray, Dean of the College of Education, University of Chicago, says:

"A supervisor should be able to analyze a recitation accurately. If he is unable to point out the strong and weak points and to offer remedies, his work will be ineffective. To do this he must select a few definite standards and make himself skillful in their use. Whatever standards he uses should be known in advance by the teachers."

Every supervisor, then, should work out a few definite standards and train himself in applying them. No one can become skillful in any activity without constant practice. *To get the best results, the teachers should be just as familiar with the standards as the supervisor is.*

JUDGMENT BASED ON MEASURED RESULTS

This calls for the use of standard tests and accurate measurements. Judgment is not a factor except in so far as it is based on facts; procedure is determined by results and facts are carefully interpreted. The pupil is placed on some scale and compared with other pupils of his class in achievement. He is also compared with the average or median achievement of his class and the general achievement for his grade, and is classified as belonging to the upper fourth, the lower fourth, or the middle fifty per cent.

In reading, for instance, we are no longer satisfied with knowing that the pupil is a poor or a good reader. We use a standard test like Courtis's Silent Reading Test which will enable us to find out exactly how many words a pupil can read silently per minute, how many questions on what he reads he can answer in

five minutes, and how accurately he can get the thoughts as shown by answering "yes" and "no" questions.

If we use the Thorndike-McCall Reading Scale we get two exact scores—the T score and the reading quotient. The former places the pupils on the base line of the normal probability curve used as a reading scale; the latter is a general score for reading achievement. The norm for reading quotients is 100. If a pupil gets between 95 and 115 as a quotient, we know he is an average in reading ability. If he gets between 125 and 135, we know he is a very superior pupil. If he gets between 75 and 85, we know he is very inferior.

Superior teachers are now putting such questions as the following to themselves and are answering them by the use of standard tests:

1. What is the present level of achievement of my class as a whole in reading, writing, spelling, arithmetic, and written composition?

2. How much is the class above or below standard achievement in the various subjects?

3. If it is below standard achievement how can I make it a standard class?

4. What is the present achievement of each pupil of my class in the various subjects?

5. How can I bring up the lower fourth of the distribution?

6. What is the total range of ability for each subject?

7. How can I shorten the range?

8. How can I keep the pupils of the upper fourth profitably employed?

9. What is the proper treatment of pupils in the lower fourth, the upper fourth, the middle fifty per cent in the various subjects?

10. Do the results indicate any sub-normals? If so, what treatment should be given them?

11. Do the results indicate any geniuses? If so, how shall I provide for them?

Further discussion of "measured results" as a topic is reserved for Chapter X. The aim here is simply to explain the method and to show its use in evaluating instruction.

QUESTIONS

1. Distinguish clearly between objective and subjective procedure in education. Give illustrations.

2. Describe the three common practices in judging the merits of instruction and give the advantages of each. Show the danger of procedure based on observation alone.

3. What were the standards used by Dr. Frank McMurry in judging the efficiency of instruction in the New York City schools? Why did he select these particular standards?

4. What standards would you use if you had to evaluate a recitation?

5. Give at least one good criticism of the Morrison standards.

6. Is most of our procedure in education subjective or objective? Explain your answer.

7. How can we make the use of standard tests a part of the routine of classroom instruction?

8. Show how the aims of the supervisor and the teachers are largely the same.

9. What is the general use of standard tests?

10. Explain how you would determine the reading ability of your school and the reading ability of each one of your pupils.

REFERENCES

McMurry: *Elementary School Standards*, Chapters I, II, III, IV. World Book Company, Yonkers-on-Hudson, N. Y.

Strayer and Norsworthy: *How to Teach*, Chapter XV. Macmillan Company, New York.

Monroe: *Measuring the Results of Teaching*, Chapters I and XI. Houghton Mifflin Co., Boston.

Judd: *Introduction to a Scientific Study of Education*, Chapter XV. Ginn & Company, New York.

Starch: *Educational Measurement*, Chapter II. Macmillan Company, New York.

Turner: *The Essentials of Good Teaching*, Chapters XIV, VII. D. C. Heath & Co., New York.

Gray: *Eighteenth Year Book*, Part II, Chapter II. Public School Publishing Company, Bloomington, Ill.

Strayer and Engelhardt: *The Classroom Teacher*, Chapter III. American Book Company, New York.

Munday

CHAPTER II

Some Specific Standards for Evaluating the Recitation

The recitation is the heart of all educational work. The superintendent, the supervisors, the buildings, and equipment exist for the sake of the teaching process. For this reason the recitation deserves a great deal of intensive study. Teachers should try to see it in its unity and in its parts. What, then, are the important factors or standards of a recitation? What, for instance, should the supervisor look for when he goes into the classroom? What factors should the teacher keep in mind as the guiding principles in all of her teaching?

In order to throw some light on this big problem the writer submitted a questionnaire to about three hundred high school principals. Two hundred and five responded.

The questionnaire divided the recitation into two big phases—teacher-activity and pupil-activity. Under each head it placed ten important factors of the recitation selected by trained teachers. The principals were asked to check the five most important. In order to show the procedure clearly the questionnaire is reproduced. The ranking of the standards according to frequency of choice follows the questionnaire. Discussion of these standards and the attitude of teachers toward them is the chief concern of this book.

STANDARDS FOR EVALUATING THE RECITATION

I. TEACHER-ACTIVITY: (Plans, devices, and acts of the teacher.)

- 1. *Clearness and definiteness of purpose.*
- 2. *Choice and validity of subject-matter.*
- ✓ 3. *Organization of subject-matter* in the forms of lesson plans, outlines, problems, projects, types.
- 4. *Effectiveness of motivation.* Did the teacher create keen interest in the task assigned?
- ✓ 5. *Selection and emphasis of essentials.* Did the teacher distinguish between essentials and non-essentials?
- 6. *Effectiveness of questioning.* Were the questions well worked out? Were they pivotal, comprehensive and thought-provoking?
- 7. *Care of routine.* Care of daily physical factors.
- ✓ 8. *Maintaining order and discipline.*
- 9. *Fixing definite results.* What habit was formed? What interest, attitude, or ideal was established?
- ✓ 10. *Effectiveness of assignment.* Was the assignment clear, definite, reasonable, and effectively motivated?

II. PUPIL-ACTIVITY: (Thoughts, feelings, and acts of the pupils.)

- ✓ 1. *Percentage of attention.* Number of pupils attentive divided by number in class.
- ✓ 2. *Self-initiated interest.* Was the activity prompted by an inner desire?
- ✓ 3. *Initiative, originality, independence, self-reliance.*
- 4. *Mental alertness.* Quick response. Rate of work.
- 5. *Accuracy and adequacy of response.*
- 6. *Social activity.* Were there evidences of cooperation, of consideration for others, of self-control, and of group loyalty?
- ✓ 7. *Habits of study.* Were the pupils quiet, reflective, independent, etc.?
- 8. *Measured results.* Scores secured by the use of standard tests.
- ✓ 9. *Weighing values.* Distinguishing between important and unimportant, essential and non-essential.
- 10. *Preparation of pupils.*

RANKING OF STANDARDS ACCORDING TO FREQUENCY OF CHOICE BY THE PRINCIPALS

TEACHER-ACTIVITY

1. Clearness and definiteness of purpose.....	147
2. Organization of subject-matter.....	129
3. Effectiveness of assignment.....	123
4. Maintaining order and discipline.....	116
5. Selection and emphasis of essentials.....	105
6. Effectiveness of motivation.....	105
7. Effectiveness of questioning.....	98
8. Fixing definite results.....	91
9. Choice and validity of subject-matter.....	59
10. Care of routine.....	16

PUPIL-ACTIVITY

1. Percentage of attention.....	133
2. Initiative, originality, independence, etc.....	131
3. Habits of study.....	127
4. Self-initiated interest.....	114
5. Weighing values.....	104
6. Social activity.....	96
7. Preparation of pupils.....	90
8. Accuracy and adequacy of response.....	79
9. Mental alertness.....	66
10. Measured results.....	35

RELIABILITY OF RESULTS

Most of the principals who were questioned are college graduates and they are giving a portion of each day to supervision of classroom instruction. They therefore should be familiar with these standards through actual use and be especially qualified for passing judgment upon relative values. Some of their responses show much discrimination. Under teacher-activity, one principal states that "choice of subject-matter" does not count. It is true that in most places it really doesn't. Teachers do not choose subject-

matter; they teach texts. This same principal states that "clearness and definiteness of purpose" involves "effectiveness of assignment" and "effectiveness of questioning." He also states that "care of routine" and "maintaining order and discipline" take care of themselves, if the more important principles are followed.

Under pupil-activity this same principal states that "percentage of attention" and "self-initiated interest" depend upon the teacher. "Initiative, originality, independence and self-reliance" grow out of "mental alertness" and "accuracy and adequacy of response."

Another discriminating principal states that "choice of subject-matter" and "organization of subject-matter" should be considered together; that "effectiveness of assignment" involves "effectiveness of motivation"; that "effective questioning" involves the "selection and emphasis of essentials"; that "free, spontaneous attention" follows "self-initiated interest"; that "accuracy and adequacy of response" shows the "preparation of pupils."

These two responses are given to show the care used by the principals in their choices and to give some idea of the reliability of the results.

ADDITIONAL STANDARDS

The questionnaire makes this request: "If these factors are not the most important, according to your judgment, will you please insert the activities you consider most important and then check the five most important."

Under teacher-activity the following were among the additional standards suggested. "pointedness in presentation"; "attitude toward the class"; "initia-

tive"; "general bearing before the class"; "voice"; "community work."

Under pupil-activity were suggested "master of subject-matter"; "habit-formation"; "attitude toward the teacher"; "mental discipline." None of these standards suggested by principals, however, was chosen often enough to be considered.

CRITICISM

The low ranking of "measured results" as a standard for judging the merits of the recitation is very significant. As a matter of fact, the results secured by the use of standard tests and scales are the best basis we have for evaluating the recitation. Why has this standard, then, such a low ranking? Simply because standard tests and scales are not used yet, except to a very limited extent, as a means for evaluating the effectiveness of teaching; hence this criticism becomes a criticism upon school practice rather than upon the results of this investigation.

Again, the low ranking of "choice of subject-matter" is significant. Appropriate subject-matter guarantees self-initiated interest and free, spontaneous attention; yet "choice of subject-matter" is not considered an important factor by some principals. The reason is clear: the teacher has little part in the "choice of subject-matter"; she teaches the subject-matter that comes to her officially through textbooks. For this reason principals do not use "choice of subject-matter" as a standard for evaluating the worth of a teacher. Again, the criticism becomes a criticism of practice rather than a criticism of results.

The first five standards under teacher-activity

are wisely selected and accurately placed. The ranking agrees with the judgment of several trained instructors who have advised with the author in such decisions. It is evident that these standards should have a much more prominent place in our teaching and also in our supervision.

The first five standards under pupil-activity are very significant. Every one of them should play an important part in the teacher's work.

QUESTIONS

1. Do you regard the ten standards under teacher-activity and the ten under pupil-activity as twenty of the most important standards involved in a recitation? If not, what standards would you eliminate and what standards would you substitute for those eliminated?

2. Can you explain the principle of frequency of choice? Is it a safe method by which to rank the relative values of the factors involved in a recitation?

3. Does your ranking agree with the ranking based on frequency of choice by the principals? How does your ranking differ? Can you justify your ranking over the ranking based on the combined judgment of the principals?

4. Can you justify the placing of "care of routine" at the bottom? Isn't "care of routine" one of the most important factors of teaching?

5. It is held by some that "measured results" is one of the best standards we have for judging the worth of teaching. How can you account for its low ranking?

6. Can you justify the low ranking of "choice of subject-matter"?

7. One principal states in his reply that "clearness and definiteness of purpose" involves "effectiveness of assignment." Can you explain this?

8. The same principal states that "percentage of attention" and "self-initiated interest" depend upon the teacher.

Do you agree with this position? Why not? Do you think Dewey would agree with him? Why not? Read Dewey's little book known as *Interest and Effort* to find out.

9. Another principal states that "choice of subject-matter" and "organization of subject-matter" should be considered together; that "effectiveness of assignment" involves "effectiveness of motivation"; and that "effectiveness of questioning" involves "selection and emphasis of essentials." Do you agree with him? Justify your answer.

10. Do you think you understand the twenty factors of the recitation described in this chapter? Try your hand in giving the meaning of "initiative" in a 200-word paragraph.

11. Observe a recitation and evaluate it by the use of the first five standards under teacher-activity and the first five under pupil-activity.

REFERENCES

Dewey: *Interest and Effort*. Houghton Mifflin Co., Boston.

Dewey: *Democracy and Education*. Houghton Mifflin Co., Boston.

Pittman: *Successful Teaching in Rural Schools*, Chapter XII. American Book Co., New York.

Bobbitt: *The Curriculum*, Chapters II, III, XVII, XVIII. Houghton Mifflin Co., Boston.

CHAPTER III

Pupil-Activity Versus Teacher-Activity

THE PROPER BALANCE

One of the best tests for judging the efficiency of the recitation is a proper balance between teacher- and pupil-participation. In the past we have overemphasized the teacher's part. We have watched his devices, his illustrations, his methods, his English. We have lost sight of the fact all along that the responses of the pupils are the real tests of the success of the teacher. *The recitation is an opportunity for the pupils to shine and should be so regarded both by the teacher and the pupils. The teacher shines best through the performances of his pupils. They should be a kind of mirror to reveal his efficiency.* It is very significant that Dr. McMurry evaluated the teaching of the New York City schools largely by the responses of the pupils.

"What an eye-opener," says Dr. Emerson E. White, "a searching written examination would be in schools where teachers talk and explain much, and the pupils recite very little; where the instruction is given largely in running talks without a halt to test results."

THE TEACHER AS THE CENTER OF INTEREST

The writer was observing a recitation not long ago in company with an associate supervisor. The teacher was attractive, enthusiastic, and normal-trained.

She used interesting devices, clever drawings, good English, directed the writing with beats and counts, used flash cards for words and arithmetic combinations. She was the center of interest and attention. But she did all the work. She told the story, asked the questions, suggested the problems. As the boys would say, "she carried the ball too often."

When we left the room I asked my associate for criticisms. He simply stated that she recited well. I saw the aptness of his criticism. The trouble with that teacher was the fact that she taught too much. She didn't provide adequately for pupil-participation. The above type of teaching is too common in our elementary grades. We are not providing adequately for pupil-activity. Teachers are putting up with barren, fragmentary, lifeless responses. Very seldom do we hear a full, complete, adequate answer to a thought-provoking question put by the teacher to secure accurate and adequate responses from the pupils.

In a recent survey of teaching in New York City public schools stenographic reports were made of eighteen recitations. During these recitations the teacher used nineteen thousand words while the pupils all together used only five thousand. This kind of teaching may be necessary in college and university work, but it should not be allowed in the grades.

THE PUPIL AS THE CENTER OF INTEREST

One of the best recitations the writer ever saw was a class-exercise in which the teacher was a shadow member of the group. It was a seventh grade reading lesson. The recitation was one of a series of lessons on King Arthur's Knights. The subject-matter, as one would expect, was intensely interesting. This

led to a vigorous attack upon the problems offered by the different selections. The pupils were thoroughly prepared; they had mastered all of the important details. The teacher sat in the middle of the group and made just a few suggestions here and there. The pupils discovered the problems, offered the suggestions, asked and answered the questions. In answering questions offered by the pupils, the teacher would occasionally suggest the reading of a certain paragraph. One could see that the pupils were thinking for themselves, weighing values, and drawing conclusions, yet the teacher did very little. What explains the success of this recitation?

1. The subject-matter was appropriate and intensely interesting to the pupils.

2. The pupils had mastered the details of the subject-matter.

3. The teacher had made ample provision for pupil-participation.

4. The pupils were made to feel that the success of the recitation in a large way depended upon them. They felt some of the responsibility.

THE OLD ADAGE

The old adage that "children should be seen, not heard" has no place in the classroom. It has too large a place in the home. What we want above everything else is pupil-expression. Why shouldn't children be encouraged both in the recitation and in the home to offer suggestions, to ask questions, to tell stories, and to make other appropriate contributions? Is there a better way to develop initiative, originality, independent thinking, and self-reliance?

The writer was in a home not long ago in which the children seemed afraid to speak. They sat and listened; that was all. A little later he was in another home of a different type. Here was a bright, cheery daughter of fifteen. She was the joy of that home. She shared the responsibility, played the piano, sang, entered into the conversation, told her school experiences, and made many other appropriate contributions. Why? Because she had been encouraged to share the responsibility of the home. She had been given a part in the entertaining.

We need this same spirit in the classroom. Spontaneity, individuality, independent thinking and action, initiative, and other fine qualities of character are too often inhibited rather than stimulated.

All this leads us to a very practical problem: How can we shift teacher-activity to pupil-activity? How can we increase the quantity and quality of pupil-response?

It isn't the purpose of this chapter to answer this question. In fact, this is one of the underlying purposes of the entire book. At this point we shall make only a few general suggestions.

HOW TO SHIFT TEACHER-ACTIVITY TO PUPIL-ACTIVITY

1. In order to throw emphasis upon pupil-activity we must make it a conscious aim in all of our teaching. Pupils and teachers must join hands in making adequate response a class ideal.

2. Pupil-participation depends largely upon fullness of details, their organization and mastery. There is no need to urge pupils to talk when they are full of a subject; when they have information and ideas to give.

3. Teachers must observe the laws of learning in teaching. One of the most important of these laws is this:

Whatever we do with satisfaction, we tend to do again; whatever we do with annoyance, we tend not to do again.

In other words, children do whole-heartedly those things that give them pleasure in the doing and do half-heartedly those things that result in discomfort. Sometimes they avoid them altogether. It follows from this law that one of the chief duties of the teacher is to make tasks not only profitable, but satisfying. Responses that bring satisfaction are repeated and built into habits.

4. The chief duty of the teacher is to create educative situations that will result in desirable behavior. Life is a series of responses to a series of situations. So is teaching. The only difference is that the situations in the latter case are created and designed by the teacher in order to obtain certain desirable responses on the part of the pupils. If a teacher desires his pupils to behave in certain ways, he has only to bring to bear upon them the influences that naturally lead to such behavior. He creates situations in which normal pupils do of their own accord what he desires them to do. In teaching we must not forget that behavior can be anticipated, controlled, and directed.

5. To secure adequate pupil-response we must find appropriate subject-matter and problems. This principle is illustrated many times in this book. In most cases units of subject-matter should not have to be made interesting to the pupil. If the subject-matter is appropriate it will be self-motivating. It will meet

a felt need in the child's life and will bring forth adequate response.

6. Interest, if it is genuine and self-initiated, will lead to spontaneous attention and increased pupil-activity. Such interest is the most powerful motive we have for effort. The best type of attention is self-initiated, subjective attention, growing out of interest in the subject-matter under consideration, or in the project or task to be performed. Attention growing out of artificial incentives, such as rewards, prizes, fear, marks, etc., is not permanent and will not result in whole-hearted effort. Forced attention develops the habit of divided attention. In such attention interest is artificial, not self-initiated; the self has not been properly identified with the task. Effort is usually proportional to self-initiated interest. The greater the interest, the greater the effort. Such interest leads the pupil to identify himself with the issues of the recitation, to assume responsibility, and to do his part towards making the work of the class a success.

To illustrate this principle: Once during the war the writer observed a group of boys build two parallel lines of trenches in a vacant lot. One of the boys, then about thirteen years of age, initiated the project and invited his playmates in to join him. They did all of the planning and all of the execution. They consulted no one. For two long weeks they worked like slaves digging those trenches. They wanted them just right, so they could move around in them and fight battles from them. Why all this interest and effort? *The project was theirs, initiated and worked out by them. It met a felt need in their lives at that time. It was really serious work on the play level,*

an excellent example of an ideal teaching situation.

There is another side to this story, though, that we ought to get. After a while the project lost interest; the trenches were deserted. Spring came and the owner wanted to plant a garden. He asked the boys to fill up the trenches, but they didn't fill them. A second request failed to get those trenches filled. You know why? *Filling those trenches was somebody else's project, not theirs.* In such cases dictation is necessary.

The story illustrates both sides of the question. It shows us the value of self-initiated interest, identification of one's self with an enterprise; it shows us the value of spontaneous attention followed by whole-hearted effort as a result of self-initiated interest. It shows, on the other hand, that education calls for some dictation. We cannot leave this matter to the child altogether. If we do, we shall find him doing only the things that give him immediate satisfaction and avoiding the things that give any degree of annoyance.

7. The project or problem method of teaching is another very effective means of shifting teacher-activity to pupil-activity. In fact, the chief characteristic of the school project is pupil-activity. The teacher usually inspires the project, but the pupils work it out under her direction. The teacher is a shadow member of the group. Now and then he may make suggestions in order to give the right direction to effort, but as far as possible the pupils do the planning and the execution. They gather the material, organize it, and apply it to the solution of the problem. These characteristics will be shown by the two projects of Chapter VI.

QUESTIONS

1. What is the most important function of the teacher?
2. Distinguish clearly between situation and response and show their relation.
3. Is behavior of children uniform? If so, can it be anticipated and controlled? How can the teacher control behavior without dictation?
4. How do the newer methods of teaching differ from the older methods?
5. What are the six points in Dewey's philosophy, as found in Pittman's *Successful Teaching in Rural Schools*, Chapter IX?
6. Enumerate all the ways you can by means of which teachers may help to shift emphasis from teacher-activity to pupil-activity.
7. Is it true that pupils should do only the things they enjoy? Explain.
8. What are the characteristics of the Project Method? See Chapter VI.
9. What are its dangers?
10. Observe a recitation and note carefully the relative amount of teacher- and pupil-activity. Write out a criticism of the recitation showing why it was a success or why it was not. Give reasons for your position.

REFERENCES

- Pittman: *Successful Teaching in Rural Schools*, Chapters IX and XII. American Book Co., New York.
- Dewey: *Democracy and Education*. Houghton Mifflin Co., Boston.
- Bonsler: *Elementary School Curriculum*, Chapters VI, VII. The Macmillan Co., New York.
- Bobbitt: *The Curriculum*, Chapters II, III, XVII, XVIII. Houghton Mifflin Co., Boston.
- Dewey: *Interest and Effort*. Houghton Mifflin Co., Boston.

CHAPTER IV

Clearness and Definiteness of Purpose as a Standard

Associated Standards: Effectiveness of Assignment;
Effectiveness of Motivation

The type lesson presented in this chapter is given for the purpose of showing the significance and importance of "clearness and definiteness of purpose" as a standard in judging the efficiency of teaching. This particular standard plays a large part in efficient teaching. Let us recall that high school principals who were questioned considered this standard the most important among ten important standards for judging the efficiency of teaching. "Clearness and definiteness of purpose" as a standard was chosen 147 times out of 205 chances for choice.

As a member of the committee appointed to build a new State Course of Study for Virginia, the writer was asked to secure some written compositions of sufficient merit to be placed in this new course as models. He was asked to use a picture as a topic for one recitation and to present the lesson in a form that might be used as a standard for such work. The picture, of course, was to serve as the basis for the compositions. The aim was clear and definite. This decision was the first step in the lesson plan that follows. It will be noticed *that the first step in the planning was the last step in the teaching. This is always the case; the first*

step in planning a lesson is to decide on the behavior desired as a result.

The second step in the planning was to find a teacher skillful in this type of work. One sees, then, how the purpose of the lesson really selected the teacher.

After finding a satisfactory teacher in the sixth grade, the next step was to select a picture appropriate to the grade and suitable as a basis for written compositions. One can see that the purpose of the recitation not only selected the teacher, but it determined the subject-matter also and gave direction to all procedure. The controlling factor all along was the clear and definite objective—*written compositions worthy to go in the new State Course of Study as models*. This was a good motive. It stimulated both teacher and pupil to do their best work.

Along with this incentive was a second motive stimulating the teacher—*procedure that might be considered standard in using pictures as a basis for written composition*.

TYPE LESSON

This lesson was planned and taught by one of the critic teachers of the Radford State Teachers College under the direction of the author and was later accepted as a part of the Virginia State Course of Study.

Subject: "The Angelus."

Grade Sixth.

Topic: The Story of "The Angelus."

Lesson Type: Appreciation.

I. Assignment:

1. Motivation:

(a) To secure, through the use of a picture, worth-while compositions.

(b) To develop a model method of procedure.

2. Problem: How can we use "The Angelus" as a basis for oral and written composition?

(Picture) The Angelus

II. Aims:

1. Teacher's Aims:

(a) To acquaint the children with the lives of some of our greatest artists and to get them to study these artists' masterpieces with a view to fuller appreciation and understanding of them.

(b) To develop in the pupils a love for the good, the true, and the beautiful in pictures.

(c) To get them to understand and appreciate "The Angelus."

(d) To get the pupils to use the content of the picture as a basis for oral and written compositions.

(e) To present the lesson in a form that might be used as standard procedure in teaching pictures.

2. Pupil's Aims:

(a) To understand "The Angelus" so as to use its story and its content as a basis for oral and written composition.

(b) To be able to tell the story in an interesting way and to write it in a paragraph or two, using clear-cut sentences free from grammatical errors and misspelled words.

III. Results Expected:

1. An understanding and appreciation of the picture.

2. Some knowledge of the life of the artist and his famous picture.

3. Sufficient information to tell or write the story of the picture.

4. An increased desire to study other pictures.
5. Ability to list some of Millet's masterpieces.
6. Written compositions worthy to go into the new State Course of Study.

IV. Methods by Which to Accomplish These Results:

1. A brief sketch of the artist's life told by the teacher.
2. A study of a large copy of "The Angelus."
3. Appropriate, thought-provoking questions on the artist and the picture.
4. Free discussion of its content and story.
5. Comparison of "The Angelus" with others of Millet's pictures.

V. The Recitation:

1. *Introduction:* This is a picture of the man whose life we have been studying as a part of the assignment of this lesson. Who is it? Who was Millet? When was he born? Where did he live? Locate the place on the map. What was his occupation as a boy? Can you tell an interesting story about him in connection with "The Angelus"? Where did he study painting? Can you give the story of his first year in Paris? Of his last years? What are some of his pictures? Why were they so unpopular during his time? To-day we want to study one of his best pictures, one of the most wonderful in the world, to see if we can find out just what message his brush has painted for us. (Present the picture and tell its story.)

2. *Subject-Matter:* A large picture of "The Angelus." Objects in the picture. These should be studied in detail. Story of the picture. Other pictures by Millet.

3. *Method:* Have any of you ever seen this picture?

Give the name of it. I wonder why it is called "The Angelus"? Let us look carefully at the objects in the picture. Now close your eyes and see it. Can you name the objects with your eyes closed? Now open your eyes to see how well your memory served you. In what attitude do we find the two human figures? What were they doing before they assumed this attitude of prayer? Why did they suddenly drop their tools and assume the attitude? What is the Angelus? Do we see now why the picture is called "The Angelus"? What beautiful custom, then, does the picture represent? What feeling does this picture give you? Do you not hear the deep tones of the bell coming over the broad field? And do you not feel like praying with the two peasants? Do you think that anyone other than a French peasant could have produced this picture? Will some one now give me the story of "The Angelus"? Here are five other paintings by Millet. Let us compare them to see if we can find any common element.

4. *Generalization:* All of Millet's pictures deal with peasant life and teach industry, simple living, and reverence.

COMPOSITIONS

This recitation was planned with the definite purpose of securing some original oral and written compositions that might be worthy of a place in the State Course of Study. One whole recitation was devoted to oral compositions based on the picture and the subject as stated: "What Millet Tells Me in 'The Angelus.'" At the end of this recitation the teacher requested the pupils to express their thoughts in writing in the form of compositions. Three of these are

given just as they came from the pupils. They are fairly representative.

WHAT MILLET TELLS ME IN "THE ANGELUS"

Among Millet's best pictures is one which tells of the work done by the peasants and their reverence in prayer—"The Angelus." Across the field is the church. We can almost hear the deep tones of the bell calling the people to prayer. The man and the woman are standing facing each other, the woman with hands clasped in front of her and the man in the same position of reverence and humility. Their attitude is one of devotion and prayer. Altogether the picture has a depth of feeling which goes far towards accounting for its popularity.

WHAT MILLET TELLS ME IN "THE ANGELUS"

In this picture there are two people, a man and a woman. They are peasants of France who work very hard. They wear peculiar clothing made mostly of homespun cloth with very bright colors. These two people are hard working people, they have been digging potatoes and putting them into sacks. As they are working they hear the Angelus. They instantly stop their work and spend a moment in prayer. The picture creates a deep feeling of reverence in me.

WHAT MILLET TELLS ME IN "THE ANGELUS"

In this picture Millet shows us two French peasants working in the fields. They are gathering potatoes. All at once they hear a bell in the church tower shown in the background. Immediately the toilers, as was the custom, drop their work and bow their heads in prayer. As we look upon the scene, a feeling of reverence steals over us. We feel like praying too.

EXPLANATION OF SUCCESS

The above recitation not only illustrates *clearness and definiteness of purpose on the part of the teacher,*

but it serves as an example of a clear, definite, and effective assignment with a worth-while motive. The children were asked to write compositions worthy of serving as models. They realized that they had been given an opportunity to make a real contribution to the affairs of life. We are not surprised that they listened with undivided attention, manifested keen interest throughout the entire project, and finally did their best to write compositions worth while.

The recitation illustrates also the close relation that exists between situation and response. As is the situation, so is the response; as is the teacher, so is the situation. The teacher builds the situation in order to secure a definite kind of behavior on the part of the pupils without any compulsion. In this case, the teacher, by means of questions and stories connected with "The Angelus," built a situation inviting oral and written compositions. The situation was so compelling, the pupils responded of their own accord. *Let us not fail to see that the first step in successful teaching is to decide on the outcome and then to build situations around the pupils that will lead them to do of their own accord what you want them to do.*

QUESTIONS

1. Do you think you could use some classic picture now as a basis for a successful recitation? If you were required to do such a thing, how would you proceed?
2. Why do you think that "The Angelus" was an appropriate picture as a sixth grade topic for oral and written composition? Could you have found a better picture for this project? If so, tell why your choice would have been better.
3. Judging the recitation by the compositions or outcomes, would you call it a success? Give your reasons.

4. Can a teacher always work out definite outcomes for a recitation as in this particular case? Explain your position.

5. Explain "the first step in the planning was the last step in the teaching."

6. What advantages has a picture as a topic for oral and written composition over the reproduction of a story?

7. Enumerate all the good features you see in such a recitation.

8. Can you find any objection to the topic as subject-matter? Explain.

9. In judging the merit of a recitation what standards would you prefer now?

10. What plans have you in mind for motivating your school work? We cannot always use the building of a State Course of Study.

11. Choose some classic picture and use it as a basis for a lesson plan. Write out the lesson plan in detail.

REFERENCES

Carpenter: *Stories Pictures Tell*, Book Six. Rand McNally & Co., Chicago.

McMurry: *The Method of the Recitation*, Chapter VII. Macmillan Co., New York.

Earhart: *Types of Teaching*, Chapters I, VIII, XV. Houghton Mifflin Co., Boston.

Mahoney: *Standards of English*, World Book Company, Yonkers-on-Hudson, N. Y.

Wilson and Wilson: *Motivation of School Work*. Houghton Mifflin Co., Boston.

CHAPTER V

Validity of Subject-Matter as a Standard

Associated Standards: Effectiveness of Assignment; Effectiveness of Motivation; Self-Initiated Interest; Initiative, Originality, Independence; Percentage of Attention

SELECTING A TOPIC

This chapter describes a recitation planned and taught by one of the critic teachers of the Radford State Teachers College. It is given with a view of helping teachers to see the meaning of the above-named standards, the part they played in this particular recitation, and the part they should play in all teaching.

The purpose was to select an appropriate topic for some grade and then to develop it as a model of presentation to be included in the new State Course of Study. The performances of the pupils were to serve as standards of possible achievement. With this definite problem in mind the writer went to the sixth grade critic teacher who was skillful in this kind of work. We talked the matter over and then began to plan for the recitation.

Our first problem was to find appropriate topics. We turned to Mahoney and read what he has to say on good topics. We consulted Sheridan also. After reading several authorities we decided that a good subject should fall within the range of the pupil's knowledge and interest, should be personal, concrete,

definite, and brief. We all know how difficult it is to write or speak on a subject about which we know little and in which we have little interest.

Our next step was to make a list of appropriate topics for sixth grade pupils, the idea being to use them as much as possible in planning and working out the project. The topics presented to the class were:

My Dream

Waiting for the School to Dismiss

What I Should Do, if I Were a Teacher

How to Make a Kite

My First Fishing Trip

Making a Snow Man

How I Helped to Keep the City Clean

A Picture of Our Home

How I Learned to Like Oatmeal

What I Wish to Be When I Grow Up

These topics were discussed freely by teacher and pupils before selecting one for the project. The vote was in favor of "My Dream."

One can see that this topic has all the requisites of a good subject; it falls within the range of the pupil's knowledge and interests, is personal, concrete and brief. It has an element of mystery about it that adds interest. It gives opportunity for initiative, encourages originality, self-expression, and natural sequence in the organization of subject-matter, that is, the experience to be described.

We could see that this topic struck a responsive chord in the heart of every pupil. Keen, self-initiated interest was manifested from the very beginning. The subject was largely its own motive, although there was a very effective objective motive.

There are hundreds of subjects that fall within the experience and interest of children of the grades; yet

we find them writing on such subjects as the present issues of our two political parties, the present opportunities of women, the League of Nations, and kindred topics that belong only to adult thinking. Probably the most important step in the successful teaching of oral and written composition is the selection of appropriate topics. The subject and its motivation must create a deep desire on the part of the pupil to talk or to write, an irresistible inner urge, in order to get satisfactory responses. Children must have ideas on a topic before they can express them. *Too many teachers simply assign topics and expect satisfactory results.* They make no suggestions as to reading matter, associations, examples, contrast, etc. No teacher should assign a topic with which she is not familiar and on which she is not able to make suggestions in case there is need for motivation.

We now have the basis for the different steps in the recitation.

THE RECITATION

1. *Assignment:* Pupils were asked to come to class the next day prepared to tell interesting dreams in the expectation of writing them out later in the form of compositions.

2. *Motivation:* The project was worth while in the eyes of the pupils. They liked the idea of participating in building a State Course of Study. The task was not simply a school effort that ended with itself. Each pupil did his best in the hope that his composition might be selected to go in the Course. Besides this objective motive there was a self-initiated interest in the subject itself. Each pupil was anxious to hear the dreams of the others. Then there is always an ele-

ment of mystery about dreams. This added to the interest and effectiveness of the motive. The recitation devoted to oral composition as a basis for written composition furnished a splendid example of an "audience situation."

3. *Teacher's Aim:* To present the topic in a way that might serve as a model in the presentation of other topics and to secure written compositions that might be worthy to serve as models in the Course.

4. *Pupil's Aim:* To tell his dream in an interesting way, using clear-cut sentences and good enunciation and then to write it out in the form of a composition, using good sentences, unmarked by misspelled words and common grammatical errors.

As stated above, the pupils were very happy in selecting *dreams* as a topic. They were told that they were to speak and to write on dreams of their own. The teacher prepared for the written paragraphs in this way:

"I wonder how many had a dream last night?" (Many hands went up at this query.) "Let us spend the period in telling our dreams either of last night or some other night."

The teacher started the program with a very interesting dream of her own. This intensified the interest and created a deep desire on the part of the pupils to tell theirs. Before the pupils began they agreed to try—

1. To be interesting.
2. To speak in a natural tone so as to be heard in the back part of the room.
3. To stick to the point.
4. To avoid the use of "and" sentences.
5. To avoid common errors of speech.

COMPOSITIONS

To show the results of this project in oral and written composition some representative responses of pupils are given below just as the pupils wrote them. The compositions were first given orally and then put into writing. These will serve us as possible attainments in this grade. Some suggestions are made as to the merits and demerits of the responses.

MY DREAM

One night as I had fallen asleep I dreamed that our teacher was so tired of teaching and we were so tired of studying that we all agreed to play 'hooky' the next day. The next morning we met at an appointed place and walked a long distance to Adams' Cave. We decided to go in, although we were afraid. We wandered far into the cave. It was so dark we could not see where we were going. We came to a large hole and fell in it. It appeared that we went down, down, down, and down until we landed in a beautiful garden. There the first man we met, to our embarrassment, was our superintendent. Our first impulse was to run, but he stopped us and asked us what we were doing down there. We told him the truth and he sent us back to school with the promise not to play 'hooky' any more. After he showed us how to get out of the cave we hustled back to school expecting to be punished severely. When I awoke I felt guilty.

There are some good qualities in this composition. The pupil tells a straightforward story with the sentences fairly well connected. He also holds to the subject and is interesting. His sentences are well formed and free of grammatical errors. He has gone a long way in mastering the sentence sense.

MY DREAM

One night I dreamed that Robert Gentry and I went down to the river to buy a boat. We found one we liked

and got in it to try it out. Just as we got into the middle of the river the boat began to leak. We headed for the bank at once. Robert bailed the water out for life while I paddled the boat toward the bank. The boat was filling rapidly. We soon saw we could not reach the bank. We prepared for the worst. Robert couldn't swim. As we went down I awoke in distress.

Note the following merits in the above composition:

1. The story is told interestingly.
2. The pupil has partly mastered the sentence sense.
3. The sentences are correctly formed and are free of common errors of speech.

THE OTHER SIDE

In order to represent the other side I am giving a composition illustrating several of the bad language habits a teacher has to deal with in the grades. It shows the presence of the "and" habit, the absence of the sentence sense, poor sentence structure, grammatical errors, and misspellings. But the content is good and revision worked a transformation.

MY DREAM

I dreamed one night that I was driving cows and I had about fifteen to drive and had to go one-half mile after them and when I got to the pasture they was waiting for me at the gate. I got them out and they started on home. I drove one of the cows in the stable and went out after the others and all but one went in and she would not go in. I was having a hard time trying to get her in and finally I decided to see why she would not go in and I went in the stable and all of the others had turned into elephants and she was afraid of them and could not get in either because there was not enough room for her, and about that time I woke up.

(Revision after a conference with the teacher.)

I dreamed one night that I was driving about fifteen cows. When I got to the pasture about a half-mile away, they were all waiting for me at the gate. As soon as I opened it they started home. I had to run to keep up with them. As soon as I reached the stable, I drove one cow in. Then I went out after the other cows. All but one went in, but this one would not. I had a hard time trying to get her in. Finally I decided to see why she would not go in. I went into the stable and found that all the others had turned into elephants. She was not only afraid of them, but she could not get in because there was no room for her. About that time I awoke.

How can we account for the success of the above recitation and the excellence of the compositions secured?

EXPLANATION OF SUCCESS

1. The subject-matter, "Dreams," was *appropriate* and *valid*. It fell within the interest and experience of the pupils, was not beyond their abilities, and had present value in the eyes of the pupils. It also gave opportunity for originality and independent thinking.

2. The recitation was very *effectively motivated*. The topic itself had its own interest, its personal contact, its mystery. Besides this *self-initiated interest* the recitation was tied up with a state project very effectively. Whenever it is possible, our school work should be connected with real life. Education is life itself, not a representation of life.

3. The interest was *keen, self-initiated*. The topic was so appropriate and fitting, it did not have to be motivated. Little effort was put forth to create interest. Every pupil was anxious to tell his dream and to listen to the dreams of his classmates. After listening

to this recitation, one could see that *out of the heart are the issues of the classroom*.

4. Along with *self-initiated interest* one always finds *free, spontaneous, undivided attention*. These two characteristics explain in a large degree the success of the above recitation. Wherever they are present in teaching, pupils put forth their greatest effort.

5. One of the finest qualities of character is *initiative*. It is closely akin to *originality, independent thinking, and self-reliance*. It is the basis of leadership, of "going it alone," of blazing the path, and of finding new and better ways of doing things. The American soldier in France excelled in this quality. He knew how to act in emergencies. He knew how to obey orders, but when orders were lacking he was not lost. If his superior was killed, he would continue to move towards the goal; he would do the things that should be done. The development of this quality should be a conscious aim of the teacher at all times. The subject-matter should be so chosen as to develop initiative, and ample opportunity should be given for its expression. "Dreams" as a topic for oral and written composition encouraged original thought, original planning, and original expression. The pupils did not depend upon the language of some book.

QUESTIONS

1. What do you consider the first step in planning a recitation? Explain what you mean. How is the first step in the planning the last step in the teaching process?

2. What characteristics make "My Dream" an ideal subject for oral and written composition?

3. Show how the above recitation was effectively motivated. Note the two kinds of motivation.

4. Show how the aims of the recitation directed procedure.

5. Have you a clear idea of the meaning and significance of *validity of subject-matter* as a standard for judging the efficiency of teaching? Note that the dreams of the pupils make up the subject-matter for the project. Are you willing to say now that the subject-matter was valid? If so, justify your answer.

6. Upon what does "percentage of attention" depend? Try to find as many as five factors.

7. What relation exists between *self-initiated interest* and *percentage of attention*?

8. Which is more desirable in teaching—forced attention or spontaneous attention? Why?

9. What relation exists between self-initiated interest and effort?

10. Can you suggest some means for developing initiative?

11. Choose an appropriate topic for oral and written composition in a fifth grade class and use it as a basis for a carefully prepared lesson plan.

REFERENCES

- Dewey: *Interest and Effort*. Houghton Mifflin Co., Boston.
- Strayer and Norsworthy: *How to Teach*, Chapter III. The Macmillan Co., New York.
- Wilson and Wilson: *Motivation of School Work*. Houghton Mifflin Co., Boston.
- Parker: *Methods of Teaching in the High School*, Chapter IV. Ginn & Co., New York.
- Mahoney: *Standards in English*. World Book Company, Yonkers-on-Hudson, N. Y.

CHAPTER VI

Organization of Subject-Matter—The Project Method

Associated Standards: Validity of Subject-Matter; Effectiveness of Assignment; Effectiveness of Motivation.

This chapter presents two county projects to illustrate the importance of organization of subject-matter as a standard for judging the efficiency of teaching. They illustrate, also, other standards that already have been emphasized. While the two projects are used for illustration, they have value within themselves.

In the third chapter of this book, methods were suggested for shifting emphasis from teacher-activity to pupil-activity. The use of the project method of teaching was given as one means of doing this. In studying the two projects of this chapter we have an illustration of adequate pupil-performance in response to a well-laid plan in the form of a project. Let us first recall the nature and chief aims of this method of teaching.

NATURE AND AIMS OF A PROJECT

Dr. J. F. Horne defines a project as "a single complete unit of purposeful experience." Professor J. A. Stephenson calls it "a problematic act taken in its natural setting." Dr. Kilpatrick emphasizes the purposefulness of the project. He calls it "a whole-

hearted purpose; a purposeful act in the teaching process." By way of definition Dr. Kilpatrick says: "A purposeful act is a typical unity of worthy life and should be that of school procedure."

Dr. Charles McMurry thinks of projects as "units of thought, organizing centers, the thinking out and understanding of which puts the student into the stream of action, into the current of life." Dr. Horne, of the University of Chicago, gives the generally accepted meaning of the term: "The project is an activity which is problematic taken in its natural setting, and involving the use of concrete material, particularly in a constructive way."

The school garden is a good example of a school project; but to make it more lifelike it has become an enterprise, or project, on the farm, at the home of the pupil. The school garden, consisting of a small plot of land at the school, is, where possible, rapidly giving place to real farming; a community activity is becoming a school activity.

The publication of a school paper is another splendid example of a school project. Here a community activity is planted in the school with "a setting as nearly as possible similar to that found in life outside of school."

Instead of learning banking from a text, a real bank is established in and run by the school. Instead of learning agricultural facts from a book, a farm project is conducted by teacher and pupils. Instead of the pupil's being led to plan a model house he is encouraged by the teacher to help in building one. From these examples one can see that in some cases the project is an enterprise planted in the community and executed by the school.

THE CHARACTERISTICS OF A PROJECT

1. The teacher usually determines the kind of project chosen, but the pupils work it out under her suggestions. She knows better than they the nature of the project that will be best suited to the class or to the school. She acts as guide and counsellor, and provides the stage setting.

2. In introducing a project the teacher takes the initiative, but she should not be conspicuous in the procedure. Now and then she may make suggestions in order to give the right direction to effort, but as far as possible the pupil should do the planning and the execution.

3. In the development of most projects, large use is made of concrete material. The pupils collect and organize this and are led to use it constructively. Note that in Professor Horne's definition the project calls for the use of concrete material in a constructive way. This is one of the chief characteristics of a project.

4. A project involves some practical problem in its natural setting, the solution of which fills a need in the life of the pupils and calls for activity beyond mere thinking. A project must be a purposeful enterprise and it should have some practical application.

5. The following characteristics of the project have been given by Dr. C. R. Mann:

- (a) A desire to understand the meaning of some fact, phenomenon, or experience. This leads to questions and problems.
- (b) A conviction that it is worth while and possible to obtain an understanding of the thing in question. This causes one to work with an impelling interest.

- (c) The gathering from books, experiences and experiments, of the needed information to answer the questions in hand.

6. In considering the project, keep in mind always these three factors: (1) the problem, the solution of which meets a felt need in the life of the pupil; (2) the natural setting, relating it closely to the real experiences of life; (3) the use of concrete material, "particularly in a constructive way." Remember that the problem involved in the project is required to be solved.

In studying the validity of subject-matter, the author has found the following outlines, used at the University of Chicago, very helpful. These outlines have been revised and adapted to present purposes.

THE VALIDITY OF SUBJECT-MATTER

I. *General formula of valid outcomes for a democratic education.*

Broad social outcomes:

Good health

Worthy home-membership

Good citizenship

Proper use of leisure

Vocational efficiency

Ethical character

Specific psychological outcomes:

Knowledge

Desirable habits

Democratic ideals

Wholesome interests

Proper attitudes

Mental discipline

II. *Specific social prerequisites of subject-matter.*

1. It should deal with the dominant social issues of to-day.

2. It should develop appropriate interests, attitudes, ideals, habits, and lead to good methods of work and study in connection with civic, vocational, home, leisure, or health issues.

3. It should correct and extend the experience of the pupil and familiarize him with the fundamental facts and ideas in regard to the world and its people that should be known by everyone.

4. It should give the pupil control of the fundamental tools of learning.

III. *Psychological Prerequisites of Subject-Matter.*

1. Subject-matter should be adapted to the present needs and capacities of children. It should, also, anticipate and prepare for their successive needs in their progressive development.

2. It should be based on the present experiences of the pupils and should correct and enlarge those experiences in the direction of better social, ethical, and moral adaptation.

3. It should have present value in the eyes of the pupil, or be presented in such a way as to show its value in later life.

4. It should be directly related to the pupil's present interest and lead to the establishment of additional interests and worthy motives which will be productive both to the individual and to the social group.

5. It should encourage and stimulate initiative, independence and self-activity.

6. It should give the pupils opportunities to weigh

values, to organize thinking, to draw conclusions, and to discover problems.

These suggestions on the project method and on the choice and validity of subject-matter place us in a position to study the two county projects that follow and evaluate the material brought into use by these two projects.

MALARIA AS A TOPIC FOR ORAL AND WRITTEN COMPOSITION

(Seventh grade project in composition and health in Princess Anne County. This was accepted for the Virginia State Course of Study.)

The Recitation

Correlation of hygiene, reading, drawing, oral and written composition:

I. Assignment:

1. Pupils were asked to read certain health bulletins on malaria, to study its causes, its characteristics and its prevention. Any disease common to the community might be selected.

2. They were also asked to make drawings of the mosquito that propagates the disease.

3. Finally, they were asked to write compositions on the cause, characteristics, treatment and prevention of the disease.

II. Aims:

1. To acquaint the children with a disease common to their own locality.

2. To acquaint them with common means of prevention.

3. To acquaint them with the usual treatment of the disease.

4. To secure written compositions on malaria that might be exhibited at the County School Fair.

III. *Motivation:*

1. The practical nature of the information involved in the project.

2. The opportunity of writing a composition that might be worthy of being exhibited.

3. The presence of a feeling of partnership in the project. The pupils were made to feel that the enterprise was theirs and that its success depended upon their efforts and contributions.

IV. *Subject-Matter:*

1. Health bulletins, special bulletins on malaria, its causes, characteristics, and prevention.

2. Information and facts given by the teachers and also by the county nurse.

V. *Results Expected:*

1. Drawings of the mosquito that scatters the disease.

2. Written compositions to be exhibited at the County School Fair.

Compositions

After a broad and general study of malaria the pupils were asked to present their knowledge of this disease in well-organized oral compositions. Several recitations were given in this oral work. The pupils were then directed to express their ideas in written form. The two compositions that follow are fairly representative.

MALARIA

Malaria is caused by a parasite which is found in the blood of the female of the *Anopheles* mosquito. They get this parasite by sucking the blood of persons who have them in their blood. It is a common idea that malaria is caused by drinking impure water or by poisonous vapor from swamps or damp ground. Experiments have been made to show that this idea is incorrect. The malaria germ gets into the body only by the bite of the *Anopheles* mosquito. To get rid of this germ we must destroy their sheltering and breeding places. This may be done by cutting down weeds in which they stay all day because they cannot stand the sun. It can be done, too, by draining, filling, oiling and introducing fish that eat the larvae of this mosquito. The house should be well screened, if possible, and all persons who are infected should be kept away from other people until they are completely cured. If not completely cured the parasite may be sucked into the body of the mosquito. Then the mosquito bites some other person and infects him with the disease. The best plan to immunize one's self against malaria is to take quinine during the malarial season. Fortunately the human body can stand enough quinine to kill the malarial germs.

MALARIA

Malaria is a disease which causes high fevers and chills. It is caused by a parasite in the blood which breaks down the red corpuscles. When the corpuscles break and the parasite gets into the blood the patient has a chill, which comes every day or every other day.

It is spread by the female *Anopheles*. The *Anopheles* bites a person and gets the parasite out of the blood and then bites another person and puts the parasite into his blood.

The mosquito has dusty wings and lays its eggs scattered about. It stands on its head when it bites. It bites only at night. It does not sing loudly.

To prevent malaria one must fill up all mud holes, get rid of all tin cans, screen rain barrels. If there is a pond or a stream which can not be filled up, pour kerosene over the water and cut down all bushes.

Merits

These two compositions are clear and direct. One can see that the writers have clear ideas as to the cause, spread, and prevention of the disease. The sentences are fairly well formed. There are no misspellings and few grammatical errors.

Demerits

The greatest deficiency of the two compositions is the absence of any natural or logical order in presenting the facts. Also, the transitions should be smoother.

BIOGRAPHY AS A TOPIC FOR ORAL AND WRITTEN
COMPOSITION

(Fifth grade composition project developed by the author for the Virginia State Course of Study.)

*The Recitation**I. Assignment:*

1. Pupils were asked to read stories on the life of Lincoln, to collect anecdotes and incidents of his life to be read before the class, and to make a collection of magazine pictures showing different phases of his life.

2. They were also asked to write compositions on the life of Lincoln of sufficient merit to be exhibited at the County School Fair.

II. Aims:

1. To acquaint the children with the life of Lincoln through stories.

2. To secure worth-while compositions on various phases of Lincoln's life.

3. To secure written compositions on his life worthy of being exhibited.

III. Motivation:

1. The opportunity each pupil was given to present new material to the class.

2. The "audience situation" created by the presentation of new material to the class.

3. Written compositions that would be worthy of being exhibited.

4. The presence of ownership. The pupils were made to feel that their efforts and contributions would be responsible for the success of the project.

IV. Subject-Matter:

The stories, anecdotes, incidents, and pictures contributed by the pupils.

V. Recitation:

1. Presentation of material by the pupils.

2. Free conversations.

3. Oral compositions on the life of Lincoln.

4. Written compositions on the life of Lincoln.

VI. Results:

The two compositions that follow are representative responses and give a fairly accurate idea of the results of this project in composition.

LINCOLN

When Lincoln was a boy he did not have a chance to go to school. His mother taught him as much as she could. She died when he was very young. His stepmother, though, continued to teach him.

Once when he was a storekeeper a woman paid three cents too much for some goods. When he found it out, he walked six miles to return the three cents.

One time when Lincoln and a friend were riding along the road side, they noticed two little birds had fallen out of their nest onto the ground. The other man failed to help the birds but Lincoln stopped his horse, got down, and put the little birds back into the nest.

When Lincoln was a boy he borrowed a book from one of his friends. He read the book until it was dark, then he read the book until the fire went out and finally until the candle went out. He put the book into a crack in the wall. That night a storm came up and ruined the book. He was very sorry, but like a man he told the truth about it and worked three days for his friend to pay for it.

LINCOLN

Abraham Lincoln was born in a log cabin on February 12, 1809. His parents were very poor so the little cabin had only one room. Little Abe, as he was called, was named after his grandfather.

Abe loved to study, but as he had to help his father he could not go to school very often. There were very few schools in those days. He liked to do sums and to write almost as much as he liked to read. He had no slate, no paper, and no pencil, so he wrote on boards with burnt sticks. Sometimes he used an old wooden shovel to do his sums on.

In the autumn of 1860 he was elected President of the United States. He was President during the war between the North and the South and was re-elected in 1864.

On April 14, 1865, President Lincoln was sitting in a box at Ford's Theatre in Washington with his wife and friends around him. A man came in quietly behind him and shot him through the head.

Comment

These Lincoln compositions show some variety in the use of connectives, a fair degree of unity, some fluency, presence of the sentence sense, good sentence structure, and a few common errors. This excellence is due largely to the fact that the teacher created the motive and filled the minds of the children with apt expressions.

EXPLANATION OF SUCCESS

In considering the project on malaria it seems to the writer that the teachers of Princess Anne County were very wise in selecting "Malaria" as a county-wide topic for oral and written compositions; the subject-matter relates to good health, to efficient social service, to the acquisition of useful knowledge, to the development of desirable habits, and to many other social issues. As the disease was common in that part of the state, general and special information connected with it was of a very practical nature. Subject-matter related to big social issues such as health and safety is especially appropriate. The teachers of Princess Anne County could not have selected a better topic for the seventh grade. Every child and every parent was vitally concerned in the outcome. The practical nature of the subject-matter constituted a strong motive. One can see from the performances of the pupils that the topic was largely its own motive; that there were self-initiated interest and whole-hearted effort.

There was an objective motive to supplement self-initiated interest, but the teachers would have obtained good results without this outside motive. I do not mean to say, however, that the pride of the pupils should not have been appealed to. The idea that their compositions might be selected over others for exhibition at the County Fair was a very effective motive with some. In building a teaching situation we are permitted to use every worthy motive that is appropriate. The writer believes in county fairs because they furnish a motive for school work all through the year.

Not only is the subject-matter of this project ap-

propriate and fitting, but its organization in the form of a county lesson plan is interesting and very suggestive. So is the organization of the Montgomery County project on the life of Lincoln. These two projects suggest broader assignments, new motives, larger cooperation, deeper public interest, and better organization.

Is it too much to say that normal pupils will always respond adequately and satisfactorily to effective situations? *The chief function of the teacher is to build situations to which pupils will respond appropriately and adequately of their own accord.* This, it seems to me, accounts for the excellence of the compositions secured on these two topics; the teachers built a situation around the pupils to obtain a definite behavior. The pupils responded appropriately and adequately. One of the best features of the above projects was the active part the pupils played; they collected the material, organized it, presented it orally, and then put it in permanent form for approval or disapproval.

QUESTIONS

1. What are the social prerequisites of valid subject-matter?

2. What are the psychological prerequisites of valid subject-matter?

3. What are the four chief characteristics of the project method of teaching? Do the two county projects illustrate these characteristics?

4. Can you distinguish between an objective and a subjective motive? How were the county projects motivated? Explain.

5. What are the characteristics of an effective assignment? Do the two county projects illustrate these characteristics?

6. Do you think that pupil- and teacher-activity were properly balanced in the two county projects? Explain. Are you satisfied with the results?

7. Can you give the relation between pupil-activity and—

- 1) Valid subject-matter.
- 2) Organization of subject-matter.
- 3) Effective assignment.
- 4) Effective motivation.
- 5) Clearness and definiteness of purpose.
- 6) Percentage of attention.
- 7) Self-initiated interest.
- 8) Maintaining order and discipline.

Explain the relation in each case.

8. Do you see the relation between valid subject-matter and—

- 1) Pupil-activity.
- 2) Initiative.
- 3) Self-initiated interest.
- 4) Percentage of attention.
- 5) Adequacy of response.
- 6) Mental alertness.
- 7) Social activity.
- 8) Habits of study.
- 9) Maintaining order and discipline.
- 10) Care of routine.

Explain the relation in each case.

9. Do you see the relation between organization of subject-matter and—

- 1) Pupil-activity.
- 2) Selection and emphasis of essentials.
- 3) Weighing of values.
- 4) Habits of study.
- 5) Social activity.
- 6) Initiative.
- 7) Self-initiated interest.
- 8) Percentage of attention.
- 9) Clearness and definiteness of purpose.
- 10) Effectiveness of motivation.
- 11) Effectiveness of assignment.

12) Effectiveness of questioning.

13) Fixing definite results.

Explain in each case.

10. Explain in a five-hundred-word paper how we can shift teacher-activity to pupil-activity.

11. Why should subject-matter be organized so as to show important relationships and so as to emphasize them?

12. Why should subject-matter be organized in units or type studies rather than left as isolated facts?

13. What is meant by saying that the subject-matter should be organized in terms of the learner?

14. What is meant by saying that the subject-matter should be organized in terms of a problem or a project?

15. Why should subject-matter be organized so as to emphasize the most important problems or topics involved?

16. Why should subject-matter be organized so as to show and emphasize productive correlations? Do the two county projects meet this requirement?

17. Why should subject-matter be organized in such form and quantity that the learner can easily gain control over the most important values involved? Explain.

REFERENCES

Betts: *Social Principles of Education*, Chapter IV. Charles Scribner's Sons, New York.

Betts: *Classroom Method and Management*, Chapter V. Bobbs-Merrill Co., Indianapolis, Ind.

Earhart: *Types of Teaching*, Chapter I. Houghton Mifflin Co., Boston.

F. M. McMurtry: *Principles Underlying the Making of a School Curriculum*. Teachers College Record, September 1916.

Parker: *Methods of Teaching in High Schools*, Chapters IV, IX. Ginn & Co., New York.

C. M. Judd: *Studies in Principles of Education*. Elementary School Teacher, Volumes XII, XIII.

Dewey: *How We Think*, Chapter VI. D. C. Heath & Co., New York.

Thorndike: *Principles of Teaching*, Chapters IV, VII. A. G. Seiler, New York.

CHAPTER VII

Organization of Subject-Matter (Continued)— The Problem Method

Probably the most talked-of topic in education to-day is the problem method of teaching. Thousands of teachers are going to the summer schools every year with the specific purpose of finding out all they can about this method. In *The Classroom Teacher* by Strayer and Engelhardt one finds the idea in these words: "Possibly the greatest reform in teaching is one which will provide for the solution of problems which boys and girls consider worth while as a regular part of their school work, in place of the more or less dreary repetition of ideas which they have gathered from books."

Dr. Harold Rugg speaks of the problem-solving ability. He thinks of it as ability to meet novel situations effectively, ability to see relationships, to pick out essentials, to analyze and organize. "It is the problem-solving attitude," says Rugg, "that is fundamental to success. We should, therefore, visualize the opportunity and the function of the schools as that of providing situations, most economically organized, for training in the development of problem-solving attitudes and of skill in the meeting of problem-situations."

Parker says, "A problem is a question involving doubt, as in Hamlet's 'To be or not to be.'" He also

says that a problem is something puzzling, perplexing, confusing, disconcerting, unexpected, queer, strange, or odd.

A problem, then, is something to be solved, a situation to be met, a difficulty to be overcome. It is a challenge to recall, to memory and imagination, to the organization of past experiences and their application to new situations. Examples: How shall we substitute arbitration for war? How shall we make the Eighteenth Amendment effective? How shall we harmonize the forces of industry? How can I make myself more effective in the classroom? How can I make this class a standard class in reading? What are the commonest grammatical errors of my pupils? And so on.

TECHNIQUE OF PROBLEM-SOLVING

First, *the problem must be discovered and clearly defined*. Of course, it must be worth while in the eyes of the pupils. *Its solution must meet a felt need*. Where there is no need there is no problem. "What Are the Opportunities of Women To-day?" may be a worth-while problem for adult women, but not for a child in the sixth grade. Too many of our problems are just school exercises to worry children instead of real, vital problems of school life. How can I make this kite? How can I learn this game? How can I without an error write this letter inviting my friend to the entertainment? What is the central thought of this chapter? These are examples of problems belonging to child life.

Second, *the problem must be kept in mind at all times in order to avoid introduction of irrelevant material*. All suggestions, all material, all data must be

examined critically and must undergo this test: How does this material contribute to the solution of the problem? If a fact doesn't contribute to the solution of the problem, it must be rejected. The two chief mistakes in problem-solving exercises are (1) failure to keep the problem in mind at all times and (2) the admission of irrelevant material. Don't allow any suggestions however interesting to sidetrack the main issue. The problem will have to be repeated again and again. So will the above test as to the relevancy of the suggestion.

Third, the child must be helped in recalling past related experiences and in gathering material and information bearing on the solution of the problem. He must weigh the material and information gathered, select and reject, and then organize and apply the material selected to the solution of the problem. Say Strayer and Engelhardt, in *The Classroom Teacher*: "No child should complete his elementary school course without considerable experience in the gathering and organizing of data necessary for the solution of problems in which he has been interested."

EXAMPLE OF PROBLEM-SOLVING

The following outline shows a fitting problem for the seventh grade with a suggestive solution (adapted) :

What factors caused the United States to become a world power?

1. Monroe Doctrine contributed largely to this end. Show how it did.
2. Annexation of Hawaii gave us possessions in the Pacific.
3. The fact that the United States entered the world markets helped. How?

4. The Spanish-American War gave us dominions overseas and helped to make us a world power.
5. Our interests in China have helped greatly.
6. Our part in the World War contributed largely.

Criticism

Notice how the problem is kept in mind at every step and how each step contributes to the solution of the problem. Many more items might be added, but these are probably the most important and are adequate. Notice, too, how our past historical experiences are recalled and applied to the situation created. Notice, again, the relation of the problem to the topic.

Topic: Period of international relations.

Problem: What factors caused the United States to become a world power?

The problem motivates the topic, stimulates thought, gives a definite objective. It vitalizes the whole process. Instead of studying about our international relations, we are finding out something worth while to a seventh grade child: How we came to be a world influence in the adjustment of international relations.

THE PROBLEM METHOD APPLIED TO GEOGRAPHY

In one of my classes a few days ago I made this assignment: In your geography textbook, study closely the ten or twelve pages devoted to the New England States in order to find a worth-while problem around which all important material dealing with this group of states may be organized. Be sure to find a problem that is large and worth while in the eyes of the pupils of a given grade. They should feel that solution of the problem will satisfy a felt need. *Don't forget that the problem-method of teaching calls for the solution of some problem. Make every subor-*

dinate idea contribute to the solution of the problem. If it does not do that, don't allow it to go into the organization.

The following are some of the problems that came to me in response to the above assignment. Some of them are desirable; some are not.

1. How do the New England States differ from the Southern States?

2. What effect does nature have upon the occupations of the New England people?

3. Why will the New England States remain a great manufacturing district?

4. How can we explain the growth of the New England cities?

5. What part has the Glacial Period played in the growth and development of the United States?

I am giving two complete responses, one showing a mistaken idea of problem development and the other showing a correct idea.

A POORLY DEVELOPED PROBLEM

Problem: What is the importance of the New England States in their relation to the United States?

1. Geographic Regions of the United States.
 - a. Surface features.
 - b. Climatic conditions.
 - c. Extent of each geographic region.
2. Northern Division of the Appalachian Highland.
 - a. How nature has divided the Appalachian Highland.
 - b. Climate.
 - c. Surface.
 - d. Industries: (1) farming; (2) mining; (3) ship-building; (4) commerce; (5) lumbering; (6) fishing; (7) manufacturing.
3. Cities.
 - a. Growth.

Criticism

Does the outline show how the problem is solved? How does "Geographic Regions of the United States" show the importance of the New England States in their relation to the United States? Is there any relation at all between the problem and the first division? How does "Northern Division of the Appalachian Highland" contribute to showing the importance of the New England States in their relation to the United States? How does "Cities" contribute to the solution of the problem?

This response is a good example of what the problem method does not call for. The pupil states a good problem, but forgets all about solving the problem in the outline. A few topics are merely placed under the problem without showing their relation to it.

The following response to the assignment illustrates what the problem method attempts to secure. The pupil finds the really big problem connected with the study of the New England States and holds to it all through the outline, solving the problem step by step.

A WELL-DEVELOPED PROBLEM

Problem: What factors combine to make New England our greatest manufacturing region?

1. Its natural resources.
 - a. Forests and quarries furnish ample building material for factories and homes.
 - b. Rapid streams and waterfalls furnish power for operation.
 - c. Navigable rivers and excellent harbors furnish means of cheap transportation of raw material and finished product.
2. Its climate.

Invigorating atmosphere makes physical exertion possible throughout the year.

3. An abundant supply of skilled labor. New England has always been noted for its manual skill.

QUESTIONS

1. What is a problem?
2. What is the problem method of teaching?
3. What relation exists between the problem method of teaching and the organization of subject-matter?
4. What are the steps in organizing subject-matter in the form of a problem?
5. Read over the story of "The Village Blacksmith" or some other good poem, find a worth-while problem, and then develop it in outline.
6. Read a chapter in American history and then find a problem under which you can organize the principal facts of the chapter in outline form.
7. Read about the geography of Brazil and then organize the most important facts under some problem in the form of an outline.
8. What are the advantages of organizing material in terms of a problem over organizing material in terms of a project?
9. How can we test the relevancy of material for solving problems?
10. What are the successive steps in solving a problem?

REFERENCES

- Smith: *Teaching Geography by Problems*. Doubleday, Page & Co., New York.
- Stark: *Every Teacher's Problems*. American Book Co., New York.
- Earhart: *Types of Teaching*, Chapters VIII, IX, and XIV. Houghton Mifflin Co., Boston.
- Strayer and Norsworthy: *How to Teach*, Chapter XIV. Macmillan Co., New York.

Teacher

CHAPTER VIII

Organization of Subject-Matter (Continued)— The Problem Method Applied to History

How does the problem method differ from the topic method? Illustrate.

Sometimes the problem method of teaching is confused with the topic method. They are both good methods and should be used largely, but it is important to see the difference between the two and to know when we are using each.

In a class of prospective teachers this assignment was made. Read in some good history an account of the two administrations of Washington, find a worthwhile problem and then organize the material given in the history around this problem with a view to solving it. The following response illustrates the topic method of procedure and not the problem method:

A TOPIC METHOD RESPONSE

Problem: What were the accomplishments of Washington's two administrations?

1. The restoration of American credit and the establishment of confidence in the federal treasury.
2. The selection of a seat for the federal government.
3. The organization of an army sufficient to maintain order, secure safety, and suppress rebellion.
4. The declaration against foreign entanglements.
5. An efficient system of indirect taxation was established.
6. John Jay's treaty was effected.
7. Party government was inaugurated.

Criticism

This is a good example of the topic method of procedure, but not of the problem method. In the first place, the question at the beginning is not a problem, something to be solved, but is simply a question, the answer to which is found in the text. The student ran through the text and picked out the important events or topics and then arranged them in order of time. She did a good piece of work, but she did not use the problem method of procedure.

Parker says: "A problem is a question involving doubt; something puzzling, perplexing, unexpected, queer, strange or odd." A problem is a challenge to the formation of hypotheses and to the organization of subject-matter. The question at the beginning of the pupil's response is simply a challenge to open the book and pick out the important events of Washington's administrations.

As an example of the problem method of procedure in response to the same assignment, we are giving below the response of another student:

A PROBLEM METHOD RESPONSE

Problem: How did Washington and his advisors establish a permanent and responsible government during his two administrations?

1. They restored American credit and established confidence in the federal treasury by—
 - a. Assuming the debts of the separate states.
 - b. Paying all debts of the Continental Congress with interest.
 - c. Establishing a federal bank under the power granted the government by the so-called Elastic Clause of the Constitution.
2. They effected a compromise as to the site of the federal capital and began to build on the banks of the Potomac.

3. They established a system of indirect taxation by means of moderate tariffs on imported goods.
4. They organized a sufficient army to maintain order, secure safety, and suppress rebellions.
5. They established the policy of avoiding entanglements in foreign affairs.
6. John Jay's treaty with Great Britain avoided war with England.
7. Party government, which seemed to be a wise plan, was established.

Criticism

What is the difference between the two responses?

In the first place, the second student finds a real problem not answered in the book. She reads the text with the problem in mind and then organizes the subject-matter with the specific purpose of showing how a permanent and responsible government was established.

In the second place, she keeps the problem in mind through the entire outline. We can see how each division contributes to the solution of the problem. The problem method of teaching, then, involves a real problem and its solution.

OTHER RESPONSES

The following are other responses to the same assignment. Are they problems or questions?

Problem: How did Washington so conduct affairs during his Presidency as to make his administration outstanding beyond the mere fact that he was the first President of the United States?

This is a good problem.

Problem: To what factors of government, established during Washington's administrations, are we indebted for the progress of our nation to-day?

This is a good problem; it provokes thought. It is a challenge. We feel that its solution is worth while. The following is the student's solution in outline:

1. The establishment of four executive departments.
2. The establishment of an effective financial system.
3. The formation of two political parties.
4. The policy of non-interference in foreign affairs.
5. The encouragement of home industry.
6. The encouragement of home inventions.

Problem: What difficulties did Washington as first President of the United States have to meet?

Problem: What two important phases of government originated during Washington's first administration and how were the difficulties that occurred during the second administration managed by Washington?

The latter problem is a poor response. One can see easily that this student fails to understand what the problem method of teaching requires.

Problem: What things contributed to the progress of the United States during the administration of George Washington?

This is a poor problem around which to organize the important subject-matter of Washington's administration. The outline is just as unsatisfactory as the problem. We cannot see how its divisions contribute to the solution of the problem.

1. Organization.
2. Foresight and wisdom of the President.
3. The growth of the Union.
4. The respect of the federal government.
5. Inventions.

ANOTHER ILLUSTRATION

This assignment was made to a class of forty prospective teachers: "Read and study in some good his-

tory the two administrations of Thomas Jefferson as President of the United States, find a worth-while problem, and then organize the material given in the history around this problem in such a way as to present it to the class." We were much pleased with the problems presented. Some are given here:

Problem: Why does Jefferson hold such an important place in American history?

Problem: How did Thomas Jefferson succeed in gaining a permanent name in history?

Problem: Why will Jefferson's administration be long remembered by the American people?

Problem: Why is Jefferson's administration one of the most important in our history?

Problem: How did Jefferson's home policy compare with his foreign policy?

These are good problems, for they set us to thinking and we feel that their solution would be worth while. The first step in the problem method of teaching is the discovery of problems. It is better for the pupils to discover these of their own accord, but if they cannot, the teacher must guide them. As soon as pupils begin to see problems in connection with any study, they are beginning to think and to master the subject. A good problem will always challenge thought.

We begin to read and to collect material bearing on the problem. We consider its relevancy, its importance, its contribution to the solution of the problem. We compare the value of material, select and reject, and organize. In all this work the solution of the problem is the end in view. The problem motivates the topic, stimulates thought, and gives a definite objective. It vitalizes the whole process. One of the problems stated above was developed as follows:

GOOD RESPONSE

Problem: Why was the period of Jefferson's two administrations one of the most important in the history of the United States?

1. It introduced democratic principles in our government.
2. It placed the welfare of the people above the welfare of the government. Jefferson was more concerned about the rights of the people than about the rights of the government.
3. It effected the purchase of the Louisiana Territory and thus established the policy of expansion.
4. Jefferson provided for extensive exploration of the West and laid the foundation for further expansion.
5. He had a greater influence for good on our political life than any other President.
6. Jefferson effected several international treaties.

This is a good response to the assignment, although No. 5 would certainly be debatable. In teaching, each division would have to be worked out in detail.

POOR RESPONSE

Here is an inaccurate response to the assignment.

Problem: Why was Jefferson one of the greatest men of America? (This was not the assignment.)

1. He wrote the Declaration of Independence by which Congress assumed the right to sever connection between England and the colonies. (This did not belong to his two administrations.)
2. He greatly increased the territory of the United States by purchasing Louisiana. (This is appropriate.)
3. In numbers of other ways he expressed and carried out the desires of the American people. (This is indefinite.)
4. He aided the progress of education by founding the University of Virginia. (This does not belong to his two administrations.)

The trouble with this student is that she did not respond to the assignment, and then she failed to test the worth-while quality of her problem.

PROBLEMS OF HISTORY

- Problem:* Why has popular education spread so rapidly since 1880?
- Problem:* What political reforms have been made in the country since 1880? Biographical sketch, Theodore Roosevelt.
- Problem:* Why were the Democrats able to elect Wilson in 1912?
- Problem:* What were the causes of the World War?
- Problem:* What is the attitude of the United States toward the Latin-American countries and islands to the south of us?
- Problem:* Why did the United States enter the World War? What reasons were given for not entering the war at an earlier period?

QUESTIONS

1. Write out a distinction between the problem and the topic methods of teaching.
2. Explain the difference between these two assignments: (1) Give four achievements of the Roosevelt administrations; (2) Give the four most important achievements of the Roosevelt administrations.
3. Work out ten worth-while problems dealing with the two administrations of Roosevelt.
4. Solve one of these problems in outline form.
5. Write out five problems of the two administrations of Cleveland and solve one in outline. Be sure your statements are complete and written in good English.

REFERENCES

- Pittman: *Successful Teaching in Rural Schools*, Chapter IV. American Book Co., New York.
- Bonser: *The Elementary School Curriculum*, Chapters VII and IX. Macmillan Company, New York.
- Charters: *Teaching the Common Branches*, Chapter XI. Houghton Mifflin Co., Boston.
- Bulletin*, 1916, No. 28. Bureau of Education, Washington, D. C.

CHAPTER IX

Effectiveness of Questioning—Its Value as a Standard

One of the best standards for evaluating teaching is effective questioning. Charles McMurry calls it "the most important instrument used by the teacher in classroom exercise." He also says that "the style of questioning adopted by a teacher betrays at once the weak points or the strong points in his mental character."

Dr. Betts says:

"Skill in questioning lies at the basis of most good teaching of children. Good questioning stimulates thought, brings out new meanings and leads the mind to right conclusions. Poor questioning leaves the thought unawakened, fails to arouse interest and attention, and results in poor mastery and faulty understanding."

In *How To Teach* by Strayer and Norsworthy, I find the following evaluation of a good question:

"The purpose of a question is to serve as a situation which shall arouse to activity certain nerve connections and thus bring a response. Questions, oral or written, are the chief tools used in schools to gain responses. In some situations it is the only means a teacher may have of arousing the response. Psychologically, then, the value of the question must be judged by the response."

"FALSE OR TRUE" TESTS

Here is a "false or true" test in geography by which a teacher can rank a class of forty or more in half an

hour with a high degree of accuracy, using the pupils to score the responses. They can do it, too, as well as you can. Here is the only direction necessary: "Number the questions and simply write *false* or *true* after I read each statement."

1. The earth rotates on its axis from east to west.
2. The inclination of the earth's axis is 23 degrees.
3. The earth has only one motion.
4. The moon presents the same side to the earth all the time.
5. The moon has three motions.
6. In full moon the earth is between the sun and the moon.
7. One can go from Chicago to Europe by water.
8. The Mississippi River is longer than any other river.
9. Maine is larger than Massachusetts.
10. The New England States have a milder climate than New York.
11. New York City is the capital of New York.
12. Agriculture is the most important industry of the New England States.
13. Maryland bounds Virginia on the west.
14. New Orleans is the capital of Louisiana.
15. The Eskimos live near the Equator.
16. There are 49 states in the Union.
17. Yellowstone Park is in New York City.
18. California is on the Atlantic Coast.
19. Boston is larger than New York.
20. Harvard University is located in New Haven.

The advantages of such a test consist in the accuracy with which it can be graded, its quickness of application, and the fact that the responses can be graded by the aid of the pupils.

METHOD OF GRADING

Since one might get half the answers right by chance, the usual method of grading the responses is to divide the difference between the number of responses right and the number wrong by the number

right. If a pupil should get 16 right out of 20 he would be entitled to 12 divided by 16, or 75 per cent.

OBJECTIVE QUESTIONS

Another method of testing much like the "false or true" method is coming into practice. It is testing by the use of objective questions.

To make this clear, suppose we have a question like this: When did Columbus discover America? This is a fact question with a definite answer fixed by history. The response the pupils make to such a question can in no way be colored by the individual's thinking, feeling, or willing. There is no ground for differences of opinion. The responses are either right or wrong and must be graded as such by the teacher.

Before discussing the value of such questions I am giving a list dealing with essentials of American history. No attempt has been made to show unity or sequence. A similar list could be made out for any subject.

1. What achievement do we associate with Magellan?
2. Who discovered the Mississippi River?
3. In what year did the Pilgrim fathers land in this country?
- 4. What religious sect settled Maryland?
- 5. With whom do we associate the settlement of Pennsylvania?
- 6. With whom do we associate the settlement of Georgia?
- 7. What general was defeated at Fort Duquesne?
- 8. With what achievement do we associate Mason and Dixon?
9. With what important event is General Wolfe associated?
- 10. Who said "Give me liberty or give me death"?
5. 11. In what year was the Declaration of Independence proclaimed? 1776
6. 12. Who wrote the Declaration of Independence? J. Adams
13. In what year was our present government organized?

14. Who was the first Secretary of the Treasury of our federal government?

7 15. In what year was Lincoln assassinated? 1860

16. Under what President did we purchase the Louisiana Territory?

8 17. With what achievement do we associate Eli Whitney? Cotton gin

9 18. With what achievement do we associate Robert Fulton? Steamship

19. With what achievement do we associate Cyrus W. Field?

10 20. With what achievement do we associate S. F. B. Morse? Telegraph

VALUES

What is the value of such a list of objective questions? How can the teacher use them?

In the first place, they are clear and definite, with answers fixed in history. We must get away from such questions as "What about Fort Duquesne?" "What about the Louisiana Territory?" "Tell all you can about Eli Whitney." "Tell all you can about the Declaration of Independence." Such questions imply indefinite and inaccurate thinking. They show the absence of a real teacher.

In the second place, a list of objective questions is an effective test of historical information. Each is a fundamental in history, something that everybody should know. To miss one is like missing a letter of the English alphabet. A good practice in teaching is to make out a list of the fundamentals dealing with a unit of instruction and then put them in the form of definite questions for the purpose of drill.

In the third place, such a group of questions will help the teacher and pupils to see and appreciate the difference between essentials and non-essentials, show them where teaching emphasis should be placed, and strengthen certain bonds of connection that should be made automatic. Teachers must be able to sepa-

rate the wheat from the chaff before they can teach effectively.

The chief value of such a list of questions is in helping to rank pupils in the fundamentals of any subject. If we assume that these twenty questions are of equal difficulty, each will have the value of five on the per cent scale. The score of each pupil would be the number of right answers multiplied by five. With such a list of objective questions one can rank his pupils in the fundamentals of a subject with a high degree of certainty.

"YES" AND "NO" QUESTIONS

Such questions are usually classed as poor, but there are teaching situations in which they are very valuable. Courtis, for instance, bases Silent Reading Test No. 2 on such questions. Every question in this test is answered by "yes" or "no." Each answer, therefore, must be right or wrong. There is no ground for judgment in evaluating the responses. The controlling factor in building the test is the elimination of judgment in grading the answers. In this way the test is made objective. To show the value of such questions in a particular case, I give a paragraph used as a test, with questions based on it:

When the spring sun was warm and the spring flowers had begun to bloom, our children had a May-party out on the lawn. Every little boy or girl who lived near by was invited. Betty wrote the invitations and Bobby carried them to the children.

1. Did the children have a May-party?
2. Was it Bobby who wrote the invitations?
3. Was the party held in the house?
4. Were only girls invited to the party?
5. Had the spring flowers begun to bloom?

The pupil is graded on the number of questions he answers in five minutes, including both the rights and the wrongs. This is a splendid test in rate of work and rate of interpretation in reading. It is also a means of ranking the members of the class in reading ability with a high degree of accuracy.

The pupil is also graded on comprehension. In answering "yes" or "no" questions the pupil stands a chance of getting fifty out of a hundred answers right whether he thinks or not. The percentage of questions answered right, therefore, is not an accurate measure of comprehension. In order to meet this objection Courtis subtracts the number wrong from the number right and divides the difference by the number right. This gives a satisfactory expression of comprehension. If a pupil answers forty questions and gets four wrong, his comprehension would be the difference between 36 and 4 divided by 36, or 32 divided by 36, which is 88.8 per cent.

THOUGHT QUESTIONS

The most useful and most effective type of question is the thought-provoking question, or pivotal question, as McMurry calls it. Such questions are subjective, since their answers will always be colored by the thinking, feeling, and willing of the pupil. I heard a preacher put this question to a group of Sunday School teachers not long ago: "What is worship?" This is a good example of the subjective type of question; there is no one definite answer to conform to. It was very interesting to watch individual differences as shown in the various responses. The worship of the Pharisee was very different from the worship of the publican. Of course, such a question is indefinite,

admits of many answers, but it does have thought-provoking power.

CHARACTERISTICS OF THOUGHT QUESTIONS

This type of question is so important that careful consideration should be given to its chief characteristics.

First, a thought-provoking question is a test of mastery of subject-matter. The answer to such a question usually brings into play a large number of facts and a large quantity of material. It is a kind of application of the subject-matter involved in the question. Such a question may aim to bring out the organization of the subject-matter, the central idea, the supporting ideas, or the beauties of some piece of literature. Take a familiar story like that of Ruth; here are some thought-provoking questions adapted to advanced high school pupils:

1. What are the literary values of Ruth's speech to Naomi? (Aesthetic.)
2. What motives were involved in the choice of Orpah? Is she to be condemned? (Analysis.)
3. What motives were involved in the decision of Ruth? (Analysis.)
4. Why was Ruth's decision so much wiser than Orpah's? (Analysis.)
5. Suggest four acts for presenting the story in the form of a drama. (Organization.)

The above questions are thought-provoking, comprehensive, and tests of mastery. They bring forward the essentials of the story and omit the non-essentials. These five questions could be used as the basis or outline for teaching the whole story.

The following questions on Esther are thought-provoking and highly suggestive:

1. What two stories run counter in Esther? (The answer to this question involves the organization and mastery of the whole story. To answer it fully one must show the plot of Haman to put Mordecai and all the Jews to death and the counter-plot of Esther to put Haman and the enemies of the Jews to death.)
2. Why did Esther delay her petition?
3. Show the artistic elements of Nemesis in the story.
4. What is the climax of the story?
5. What are the two most important lessons taught by the story?

Other thought-provoking questions could be based on the stories, but these will suffice to show their importance in teaching. Effective teaching depends largely upon these three things: mastery of subject-matter, ability to formulate thought-provoking questions, and skill in using such questions in class. X

PREREQUISITES OF GOOD QUESTIONING

I. *Independence of the text.* Just as in speaking to a group one should not allow a book or any notes he may have made to come between him and his audience, so in teaching one should not allow the text to come between him and his class. Dr. Betts says that "One who does not know his lesson well enough so that he can ask questions practically without reference to the text, let alone referring to the printed questions, or asking questions in the words of the text, is not ready to teach the lesson."

Two Examples

In order to show the contrast between dependence and independence in questioning there are described below two recitations that came under the author's observation not long ago in a certain Sunday school. The subject of the hour was "The Good Samaritan."

Teacher (looking at the text): Who went down from Jerusalem to Jericho?

Pupil (looking in the quarterly): A certain man.

Teacher (reading from a list of questions): What happened to him?

Pupil (reading from the quarterly): He fell among thieves.

Teacher: What did the thieves do to him?

Pupil: They stripped him of his raiment.

Teacher: What else did they do to him?

Pupil: They wounded him and left him half dead.

Teacher: Who by chance came down that way?

Pupil: A certain priest.

And so on, all the way through the story. The whole recitation was a process of reading questions and answers from the text. Can you imagine any experience more deadening to interest, spontaneity, and initiative than such procedure! Such questioning is ridiculous, yet it is only too typical.

In another part of the room I observed another type of recitation; both teacher and pupils were independent of the text.

Teacher (looking directly at the pupils): What occasion led Christ to use the parable of the Good Samaritan? (This question, of course, followed some preliminaries clearing up the meaning of the parable and recalling some of the most important parables used by Christ.)

Pupil (facing the class): It grew out of a conversation that took place on one occasion between a certain lawyer and Christ. This lawyer asked Christ what he must do to gain eternal life. "What is written in the law?" asked Christ. And he answering said, "Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy strength, and with all thy mind; and thy neighbor as thyself." "Thou hast answered right," said Christ; "this do, and thou shalt live." But "Who is my neighbor?" asked the lawyer. The parable of the Good Samaritan was the answer to that question.

Teacher: Who can come before the class and tell the whole story in his own language? (Pupils volunteered, two of them telling the story beautifully).

Teacher: Who can come before the class now and answer the lawyer's question? (Several pupils volunteered and gave interesting interpretations of the story.)

And so the recitation proceeded until the end of the period.

II. *Careful organization and thorough mastery of subject-matter.* This prerequisite is a condition for independence in questioning. The teacher must distinguish between essentials and non-essentials, main and subordinate headings, and the relations among them. Dr. Charles McMurry says:

"Good questions spring out of a well-organized body of knowledge. Without perceiving clearly the organizing centers of thought in his subject, the teacher is at a loss to frame or where to apply his questions. Prudent and thoughtful questions strike in towards the main line of thought and touch the pivotal points in a series of topics. They are centripetal rather than centrifugal. It takes thought and practice to hit the mark with a question."

The following organization and questions for teaching the parable of the Good Samaritan are suggestive:

ORGANIZATION

1. The occasion of the parable.
 - a. The motive of the lawyer.
2. The story of the parable.
 - a. The priest was not a neighbor.
 - b. The Levite was not a neighbor.
 - c. The Samaritan was a neighbor.
3. The lesson of the parable.
4. The application of the parable.

QUESTIONS

1. Why did the lawyer think of such a question?

2. What was his motive in asking it?
3. Why didn't Christ answer the question directly?
4. Why did Christ use a Samaritan as one of his characters?
5. How is the parable connected with the Christian churches of to-day?

III. *Thorough knowledge of the pupil's abilities, experiences, and his background of information as a basis for answering questions.* It is not only a waste of time to ask questions beyond the maturity of pupils, questions for which they are not prepared, but it is unfair, unjust, and discouraging. In history, geography, and all other subjects, it is highly important for teachers to see that the essential facts and necessary data are presented to pupils before calling upon them to reflect, draw conclusions, or answer questions.

Take a question like this: "Why did Joseph delay disclosing his identity in the presence of his brothers in Egypt?" Such a question is suitable for mature thinkers, for students who have made a close study of the story of Joseph as a whole, but it would be beyond the understanding and appreciation of children.

Strayer and Norsworthy emphasize the importance of adaptation in these words: "Every question must deal with material that is on the level with the stage of development of the one questioned."

A short time ago I observed a very effective lesson in the fourth grade on the dreams of Joseph. The questions used by the teacher were so appropriate and apt that I am reproducing the entire recitation. The time was in December just before Christmas.

THE RECITATION

Teacher's Aim: To get the pupils to see the connection between dream life and real life.

Pupil's Aim: To see the connection between the dream life and real life of Joseph.

Introduction: "I wonder how many of you have had interesting dreams of late that you would like to tell the class?" This elicited many responses from pupils. Some told dreams of Santa Claus; others of snowballing, and so on. The second question was this: "I wonder why certain pupils" (calling them by name) "dreamed of Santa Claus and others about snowballing?" The responses to this question were very satisfactory. Several replies came simultaneously: "They have been thinking and talking about Santa Claus." "They have been actually snowballing and enjoying it. Some do not enjoy snowballing." One little girl said that she dreamed that "Mother attended the card party and won the prize." I happened to know the home of this pupil and to know that her dream revealed one of the chief interests of that home. The teacher couldn't dwell on the aptness of this dream but some of the pupils saw its meaning. They could see that we dream about the things that we are interested in, the things that are uppermost in our minds at the time.

The teacher's third question was this: "I wonder who can tell me the two dreams of Joseph?" Several volunteered to tell the dreams. This was followed by the fourth question: "I wonder why Joseph had these particular dreams?" Do you think a city boy would have had these dreams? Why did Joseph dream that his sheaf stood erect and his brothers' did obeisance to his? Why was Joseph's star brighter than his brothers'?" The responses to these questions were free and spontaneous and remarkably intelligent. The pupils were now ready for the final question: "Who can tell me now the connection between dream life and real life?" In responding to this question they didn't need any prompting. Their experiences and the information they received from the recitations formed an ample background of knowledge to answer all questions put by the teacher. The success of this recitation was due largely to the happy setting in the real dreams of the pupils and the appropriate and apt questions used by the teacher. She knew the responses she wanted and planned just the situation that

would call forth these responses without any effort or dictation on her part.

EXCELLENCES IN QUESTIONING

1. A few pivotal questions are better than a large number of detailed questions.

2. Thought questions should be planned before the recitation. "It is not safe to depend upon the inspiration of the moment."

3. Successive questions on any unit of thought should possess unity and sequence.

4. Questions should be used to test knowledge, to provoke thinking, and to emphasize essentials.

5. Teachers should be independent of printed questions.

6. Individual response should be required when self-reliance and independence are sought.

7. Teachers should see that their questions are uniformly distributed.

8. The question should be put to the class before the pupil is called upon to respond.

9. Children should be given opportunities at times to question the teacher and the class.

WARNINGS

1. Avoid asking too many questions.

2. Avoid questions that lead to guessing.

3. Avoid vague, indefinite, and general questions; such as, "What about Appomattox?" "What about Braddock's defeat?"

4. Avoid repeating questions or answers.

5. Avoid leading questions; such as, "Doesn't the earth rotate on its axis from west to east?" "Do you think plants would grow in a very dark place?"

6. Avoid calling upon pupils in any fixed order.
7. Avoid technical questions of all kinds.

QUESTIONS

1. What is the value of effective questioning as a standard of the recitation?
2. Make a "false or true" test in history.
3. When are "yes" and "no" questions valid?
4. How does Courtis find the comprehension of pupils in his reading test?
5. What is meant by objective questions? When can they be used advantageously?
6. Make a list of twenty objective questions in geography.
7. Make a list of twenty objective questions in English grammar.
8. What are the values of objective questions?
9. What are the characteristics of thought questions?
10. Write out ten thought questions on "The Great Stone Face" that might be used as a basis for teaching this story.
11. What are the prerequisites of good questioning? Discuss their values.
12. What are some excellences in questioning?
13. What are some things to be avoided?

REFERENCES

- Betts: *How to Teach Religion*. Abingdon Press, New York.
- McMurry: *Handbook of Practice for Teachers*. Macmillan Co., New York.
- Strayer and Norsworthy: *How to Teach*. Macmillan Co., New York.
- Brogden: *Suggestions for Rural School Supervisors*. Department of Education, Raleigh, N. C.
- De Garmo: *Interest and Education*. Macmillan Co., New York.
- Fitch: *The Art of Questioning*. Bardeen, Syracuse, N. Y.
- Weigle: *The Pupil and the Teacher*. Morehouse Publishing Co., Milwaukee, Wis.

Index

CHAPTER X

Measured Results

The purpose of this chapter is not to enter into an extended discussion of educational measurements, but simply to show the value of *measured results* as a standard in educational procedure. This is unquestionably the best standard we have for judging the efficiency of teaching.

USE OF STANDARD TESTS

In taking charge of a class the teacher should first determine by means of reliable tests the standing of the class as a whole, its level of achievement, how far it is above or below the average. He should compare the class with other classes of the same grade in spelling, reading, writing, arithmetic, and composition. The pupils should also be ranked according to achievement in these different subjects, comparing each pupil with the class median and the standard median, and noting individual differences. It is very important for teachers to rank their pupils and to treat them as members of the upper fourth, the lower fourth, or the middle fifty per cent. Towards the end of the session similar tests should be given in order to determine how much progress the class as a whole has made and how much progress each pupil has made. Such a program calls for measured results secured by the use of standard tests. The object of this chapter is to make

it possible for the average teacher to use such tests intelligently and effectively. There is no virtue in merely giving the tests; one must be able to interpret results, to recognize good practices and encourage them and, at the same time, to see weaknesses and offer remedies. It is very difficult to see the value of standard tests and to learn how to use them intelligently and effectively by reading and studying about them; one needs to experiment while he is studying them.

In using standard tests begin with the simpler ones and gradually introduce the more difficult tests. Spelling tests are easy to give and the results can be interpreted without trouble.

SPELLING TESTS

Suppose a teacher desires to find the spelling achievement of her class in September, how shall she proceed? Let us assume that it is a fourth grade class of forty children. Open Ayres's *Measuring Scale for Ability in Spelling* or Buckingham's *Extension of the Ayres Spelling Scale*, and select twenty-five words from column M. (If you haven't copies of these scales, order them at once from the Russell Sage Foundation, New York City.) It will be noticed that fourth grade pupils in general make 84% on the words of this column. Give these out to the children, mark the misspellings, and subtract them from the total number of spellings. Put your work in this form:

Number of pupils in class	40
Number of words used	25
Number of spellings (40×25)	1000
Number of correct spellings	800
Per cent of correct spellings	80
Standard on the Ayres Scale	84

A teacher ought to be able to test a room in spelling in this manner in thirty minutes. Seventh grade pupils may be used in correcting the papers, if the teacher so desires.

This simple treatment of results reveals the present spelling achievement of the class. The teacher can see that the above class is four points below the standard. He knows, too, that the situation calls for drill work in spelling. At the end of one or two months the teacher ought to select another list of words from Column M and try them out on the class again. The results in comparison with the results of the first test will show just how much progress has been made between the two.

In 1920 the writer was asked to test the upper fourth grades of the Lynchburg schools in spelling, reading, writing, and arithmetic. Some of the results of this survey with interpretation are given in order to show teachers how to proceed in making a limited survey of this kind and in order to help them in using tests and measurements in school work. The procedure described here could be used successfully in any school system.

THE LYNCHBURG SPELLING TEST

As a test in spelling, twenty-six common words were selected from the "hundred demons" so designated by Dr. W. F. Jones in a bulletin giving results of his investigation of material in English spelling. These words were most frequently misspelled by the pupils involved in his investigation and are of sufficient importance to deserve repetition. (See list on next page.)

THE ONE HUNDRED SPELLING DEMONS OF THE ENGLISH
LANGUAGE, ACCORDING TO JONES

ache	done	making	they
again	don't	many	though
always	early	meant	through
among	easy	minute	tired
answer	enough	much	to-night
any	every	none	too
been	February	often	trouble
beginning	forty	once	truly
believe	friend	piece	Tuesday
blue	grammar	raise	two
break	guess	read (rĕd)	used
built	half	ready	very
business	having	said	wear
busy	hear	says	Wednesday
buy	heard	seems	week
can't	here	separate	where
choose	hoarse	shoes	whether
color	hour	since	which
coming	instead	some	whole
cough	just	straight	women
could	knew	sugar	won't
country	know	sure	would
dear	laid	tear	write
doctor	loose	their	writing
does	lose	there	wrote

The twenty-six "demons" selected are given on the next page, with the standard percentage for each word in the fourth grade on the Ayres Scale. One can easily look these up.

One of the interesting aspects of this test is that only in five instances do the pupils of Lynchburg fall below the standards set by Ayres. For the word "coming" Ayres gives 92%; Lynchburg makes 87.7%. Lynchburg receives lower scores also for "could," "two," "too," and "every." For the other twenty-one words Lynchburg is well above the standard on the Ayres Scale.

WORDS SELECTED, WITH THE AYRES AND LYNCHBURG
PERCENTAGES

<i>"Demons"</i>	<i>Ayres</i>	<i>Lynchburg</i>
again.....	84	94.6
always.....	79	95.2
any.....	92	95.8
buy.....	88	95.2
coming.....	92	87.7
could.....	92	81.5
dear.....	96	98.8
doctor.....	79	92.2
easy.....	92	97.0
every.....	94	93.4
hour.....	92	93.4
lose.....	50	57.7
much.....	92	95.2
once.....	88	95.8
said.....	94	94.6
says.....	84	89.2
sure.....	79	89.8
they.....	92	95.2
to-night.....	92	98.8
too.....	95	93.4
two.....	92	87.7
wear.....	50	87.0
week.....	92	97.0
women.....	59	79.1
write.....	79	86.3
wrote.....	79	85.7
Average	84.5	90.6

Summary (Lynchburg)

Number of pupils, all schools	168
Number of words	26
Number of spellings	4368
Number of incorrect spellings	414
Number of correct spellings	3954
Per cent of correct spellings	90.5
Ayres Standard	84

INTERPRETATION

- (1) The above results show that the pupils of the

upper fourth grades of the Lynchburg schools are six points above the average.

(2) The most significant observation drawn from the results of the Lynchburg test is the fact that five words gave occasion for 184 misspellings out of a total of 414. "Lose" was misspelled 71 times; "women," 35; "could," 31; "wrote," 24; "write," 23.

Dr. Jones found that the four most frequently misspelled words are "which," "their," "there," and "separate." Judging from the Lynchburg results, one would be justified in adding "lose" and "women" to this group.

What do these facts mean for the supervisor and teacher of spelling? They show, if nothing else, where to place teaching emphasis. The one hundred spelling "demons" and words of that class must receive more attention. The quickest and easiest way to raise a class to a high level of spelling ability is to find these troublesome words and then drill upon them. The spelling of these few demons should be made as automatic as the spelling of the word "boys."

(3) Another interesting fact revealed by the returns is the uniformity of spelling ability among the individual pupils. Few pupils missed over four or five words. None missed more than ten; many were marked 100%. The range of individual variation is from 60% to 100%. In most classes we find two or three total failures. The fact that Lynchburg has provided special classes for backward pupils eliminates these total failures. This piece of administration is wise in many ways, certainly wise when we are working for high standards as we should always do. Two or three backward pupils in a room are great handicaps to the teacher and to their fellow-pupils.

(4) As a random sample, or cross-section, of the spelling ability of the Lynchburg elementary schools, the above results tend to show that these schools, considering them as a whole, are at least 6% above the average spelling ability of cities in general. The returns come from every part of the city, and, therefore, certainly justify the conclusion.

Note that the above observations are based on objective results; no judgment is involved.

LYNCHBURG'S READING TEST

As a test in reading, Courtis's *Silent Reading Test, No. 2* was used. If you are not acquainted with this test, order sample copies from S. A. Courtis, Detroit, Mich. It is an excellent test of reading ability. It measures three performances:—rate of silent reading, rate of answering questions on paragraphs read, and comprehension. One hundred and fifty-eight upper fourth grade pupils were tested. On page 99 are the results for one room with some individual interpretations.

The table represents a simple distribution of scores. The numbers to the left stand for the individual pupils. The three grades that each pupil made are placed opposite his name. Pupil No. 1, for instance, read 179 words per minute, answered 34 questions in five minutes, and made 90 in comprehension. This kind of treatment is necessary for individual interpretation. At the same time it gives the achievement of the class in comparison with standard achievement. We see that this class is six points above the standard in rate of reading, just reaches the standard in number of questions answered in five minutes, and is one-half point below the standard in comprehension.

SIMPLE DISTRIBUTION

Pupil's No.	Words read per minute	No. ques- tions ans. in 5 min.	Compre- hension
1	179	34	90
2	221	60	80
3	136	21	68
4	107	35	100
5	124	23	96
6	215	36	80
7	158	32	86
8	239	45	88
9	159	45	93
10	197	51	76
11	91	18	87
12	288	43	98
13	121	29	96
14	141	34	97
15	71	20	95
16	123	24	80
17	138	20	89
18	244	43	90
19	88	22	70
20	99	18	71
21	183	39	94
22	145	30	96
23	175	28	84
24	166	25	96
25	163	50	93
26	128	32	81
27	167	41	92
28	224	49	90
29	230	25	68
30	179	20	82
Median	161	32	89.5
Standard	155	32	90

(Standard scores always accompany the tests.)

INDIVIDUAL INTERPRETATION

Pupil No. 12 stands "high—high—high" for the three scores, as can be seen by comparing his scores

with standards at the bottom. Such a pupil, according to this test, has marked ability. He is an unusual pupil. This fourth grade pupil has already seventh grade reading ability. All a teacher has to do with such a pupil is to furnish him with appropriate reading matter.

Take, on the other hand, pupils Nos. 11, 19, and 20. They stand "low—low—low" for the three scores. These pupils lack native ability, or have had very poor training. They should be tested for general intelligence. If a lack in intelligence is the cause of their low grades, they should be assigned to the room for backward children. They need individual treatment.

Pupil No. 6 is an interesting case; he stands "high—high—low" in the three scores. This pupil needs training in accuracy. He reads too fast and guesses at the answers to the questions sometimes. He should be required to do a large amount of reading to answer specific questions. Pupil No. 2 is of the same type.

Pupil No. 15 stands "low—low—high." According to the interpretation placed upon such a pupil by this test, he lacks native ability, but has had good training. He is slow, but he reads and re-reads until he is sure of his answer.

Pupil No. 29 stands "high—low—low." Such a pupil has had very poor training or is lacking in native ability.

In this way every case should be diagnosed and appropriately treated. The test has a simple scheme of interpretation, which I have found very helpful. This scheme is given in Monroe's *Measuring the Results of Teaching*, page 47.

Four other classes were tested. The results were treated and interpreted just as were the results of the

above class. A summary of all the classes is given on the next page.

MEDIAN

In a simple distribution (as on page 99) the median score is the middle score when the grades are arranged in order of magnitude. In case there is an even number of scores the average of the two middle scores is the median. If there are thirty-one scores, the sixteenth score is the median; if there are thirty, the average of the fifteenth and sixteenth scores is the median. To save time the median may be considered a good substitute for the average of all the scores and it is really a better standard than the average. Let us understand clearly that the median is simply the middle score in a distribution like the above, or it is the point on the scale below which and above which half of the scores fall.

In grading pupils we must think in terms of a scale expressed in some kind of unit. Our business is to place the pupil on the scale accurately or in some interval. The important thing for one to know about a pupil is his relative position. Is he in the top fourth or the lower fourth? Is he just an average?

Another point of importance is the total range of the distribution. This is the space between the lowest and the highest score when the scores are arranged in order of magnitude. In the distribution for the rate of reading we notice that one pupil read at the rate of 288 words per minute while the slowest read only 71 words per minute. The total range, then, is 71—288. In other words, the fastest pupil read four times as fast as the slowest. This is rather a wide range in reading ability for one grade.

RANKING SCORES

Words read per minute	No. questions ans. in 5 min.	Compre- hension
288	60	100
244	51	98
239	50	97
230	49	96
224	45	96
221	45	96
215	43	96
-----Q ₃	-----Q ₃	-----Q ₃
197	43	95
183	41	94
179	39	93
179	36	93
175	35	92
167	34	90
166	34	90
163 } Median	32 } Median	90 } Median
159 } 161	32 } 32	89 } 89.5
158	30	88
145	29	87
141	28	86
138	25	84
136	25	82
128	24	81
124	23	80
-----Q ₁	-----Q ₁	-----Q ₁
123	22	80
121	21	80
107	20	76
99	20	71
91	20	70
88	18	68
71	18	68

QUARTILE POINTS

The upper quartile (Q_3) is the point on the scale above which one fourth of the scores fall and below which three fourths fall. To find this point we merely count down from the highest score until we get one fourth of the cases. The lower quartile (Q_1) is that point on the scale below which one fourth of the cases fall and above which three fourths fall. To find it we simply count up from the lowest score until we get one fourth of the scores. The space on the scale between these two points is called the middle fifty per cent, and it contains half of the scores in the distribution. The scores above the upper quartile are called the upper fourth; the scores below the lower quartile make up the lower fourth; the scores between these two points make up the middle fifty per cent.

Teachers should familiarize themselves with these important concepts: median, upper quartile, lower quartile, lower fourth, upper fourth, and range. Are you sure that you can give a clear definition of each? We have to use these terms in interpreting any distribution. Keep in mind the fact that we have to think in terms of some kind of scale.

FREQUENCY DISTRIBUTIONS

It is very important for teachers to know how to make a frequency distribution, find its median, its upper and lower quartiles, and its middle fifty per cent. To help teachers understand these steps I am using the three frequency distributions made out of the Lynchburg scores. (See next page.)

The first is made on a scale expressed in words read per minute. The scale is divided up into inter-

THREE FREQUENCY DISTRIBUTIONS

Words read per minute	No. of scores	Ques. ans. in 5 min.	No. of scores	Compre- hension	No. of scores
300	1	70	1	100	18
280	3	65	2	95	23
260	3	60	1	90	27
240	4	55	2	85	17
220	11	50	6	80	25
200	11	45	10	75	10
180	15	40	12	70	7
160	18	35	23	65	10
140	28	30	27	60	4
120	29	25	37	55	5
100	18	20	20	50	0
80	9	15	10	45	1
60	7	10	5	40	0
40	1	5	2	35	6
Total	159	Total	159	Total	158
Median 150.7		Median 30.9		Median 88.2	
Standard Median 155		Standard Median 32		Standard Median 89	

(Standard Medians are found with the tests)

vals of twenty words each. Beginning at the bottom we have one pupil who read 40 words per minute; seven that read 60 words per minute, and so on all the way up the scale. The second distribution is made on a scale expressed in number of questions answered in five minutes. It is divided up into intervals of five questions each. Beginning at the bottom we have two pupils who answered 5 questions in five minutes; at the top we have one pupil who answered 70 questions. The third distribution is made on the per cent scale, but the procedure is the same.

Suppose we wish to find the median of the first frequency distribution (Words Read per Minute). First divide the total number of scores, 158, by 2 to find what we call the half-sum. This is 79. We will add up the frequencies in the right-hand column until we get to the beginning of the interval containing the half-sum ($1+7+9+18+29=64$). If we were to add the next frequency, 28, we would get 92, which is beyond the half-sum. We therefore call 140 the approximate median, and know that the true median will be found somewhere in the interval between 140 and 160. Now subtract the partial sum, 64, from the half-sum, 79 ($79-64=15$). Divide this difference, 15, by 28, which is the frequency of the interval containing the half-sum. Multiply the fraction $\frac{15}{28}$ by 20, the value of the interval ($\frac{15}{28} \times 20 = 10.7$). The product, 10.7, is known as the correction. This, when added to the approximate median, 140, will give the true median ($140+10.7=150.7$, true median).

The medians for the other two distributions given on page 104 (Number of Questions Answered in Five Minutes, and Comprehension) are found in the same way.

QUARTILES IN A FREQUENCY DISTRIBUTION

In the first distribution (Words Read per Minute), to find the lower quartile (Q_3), first divide the total sum 158 by 4. The result, 39.5, we call the fourth-sum. Add up the frequencies in the right-hand column until you get to the beginning of the interval containing the fourth-sum. This is the interval containing frequency 29. Our addition ($1+7+9+18$) has given us as a partial sum, 35. Subtract the partial sum 35 from the fourth-sum, 39.5. Divide the remainder, 4.5, by 29 (frequency containing fourth-sum), and multiply this fraction by 20, which is the value of the interval containing the fourth-sum ($\frac{4.5}{29} \times 20 = 3.1$). This 3.1 is the correction which must be added to 120 (approximate lower quartile) to obtain the true lower quartile, that is, 123.1.

The same procedure is followed in determining the upper quartile (Q_1), using the three-fourths-sum, 118.5, instead of the fourth-sum. The partial sum is 110, the correction is 11.6, the approximate upper quartile is 180, and the true upper quartile 191.3. The operations would be as follows:

$$158 \times \frac{3}{4} = 118.5, \text{ three-fourths-sum}$$

$$1+7+9+18+29+28+18=110, \text{ partial sum}$$

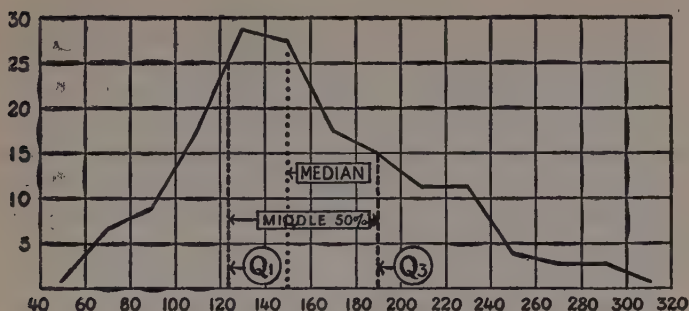
$$118.5-110=8.5$$

$$\frac{8.5}{15} \times 20 = 11.3, \text{ correction}$$

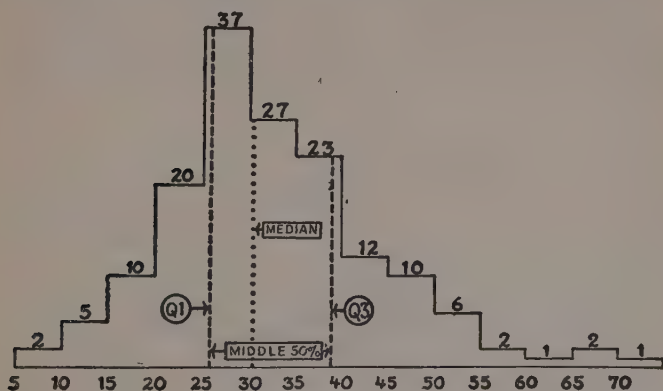
$$180+11.3=191.3, \text{ true upper quartile}$$

USE OF GRAPHS

In order to show the use of graphs in the treatment of scores we are expressing the first frequency distribution on page 104 in a polygon graph and the second one in a column diagram. The base line of a graph is



Graph showing the distribution of 158 scores for number of words read per minute. The scores were made by the upper fourth grades of the Lynchburg schools. Note that the height of the curve depends upon the number of scores falling beneath the curve. This graph and the diagram given below are based on the first two Frequency Distributions in the table on page 104.



Column diagram showing the distribution of 158 scores for number of questions answered in five minutes in the *Courtis Silent Reading Test*. The scores were made by the upper fourth grades of the Lynchburg schools. Note that the height of the columns depends upon the number of pupils falling on the scale within the space of each column.

always the scale; the line to the left simply shows the number of pupils falling in each interval. We usually work from the middle of the interval instead of from the beginning of the interval. Pupils distribute throughout the interval; hence the mid-point of the interval is the best representation of all the scores falling in an interval. In the graphs on page 107 we work from the mid-points.

DR. JUDD'S ESTIMATE

We cannot do better in closing this chapter than to give Dr. C. H. Judd's estimate of our present efforts towards objective standards:

"The effort to lay down by investigation satisfactory standards of school work is one of the most productive lines of educational inquiry which has ever been instituted. Like all great movements, this movement of standardization has been misunderstood and opposed, but it is steadily gaining ground and promises to be the largest contribution of this generation to education."

QUESTIONS

1. Would my school be an average if standard tests were applied?
2. How can I find out whether my school is above or below reliable standards?
3. How did the superintendent of the Lynchburg schools find out whether his schools were above or below the standard?
4. Shall I be able to tell just how much progress my grade or school has made during the session?
5. Am I as familiar with standard tests as I should be?
6. How can I make myself more skillful in using standard tests?
7. How can I learn to interpret the results of tests and to provide remedies for undesirable conditions revealed?

8. Do I appreciate the value of "ranking" pupils according to achievement in some test and understand that the middle grade in the "ranking" is the median score?

9. Am I sure that I can make a frequency distribution, find its median, the upper and lower fourth together with the middle fifty per cent?

10. Do I know how to treat the pupils of the upper fourth, the lower fourth, and the middle fifty per cent?

11. What is the value of a simple distribution showing the grades of the individual pupils?

12. Am I using my own school as a laboratory for experimentation? Have I found the spelling "demons" for my own school? Have I discovered the individual differences of my own pupils and established the reading ability of each?

13. What is the value of procedure based on measured results over procedure based on analysis? Over procedure based on judgment?

14. What is the difference between a subjective and an objective standard?

15. What are some of the simplest and best tests for reading, writing, spelling, arithmetic, and composition?

REFERENCES

Monroe: *Measuring the Results of Teaching*. Houghton Mifflin Co., Boston.

Strayer and Norsworthy: *How To Teach*. Macmillan Company, New York.

Strayer and Engelhardt: *The Classroom Teacher*, Chapter IX. American Book Co., New York.

Chapman and Rush: *The Scientific Measurement of Classroom Products*. Silver, Burdett & Co., New York.

CHAPTER XI

Principles of Lesson Assignment with Illustrations

Effective lesson assignment as a standard for judging the efficiency of teaching is so important that it deserves an entire chapter for its consideration. One of the outcomes of a recitation should be an effective assignment for the next recitation. It ought to be a natural outcome—a step forward in the course, some new problem to be solved, some pertinent question to be answered, some statement to be tested.

Recently a group of prospective teachers had "initiative" as a topic for discussion. The day before they had been asked to come to class prepared to discuss this topic. One pupil discussed its meaning, another its chief characteristics, another its importance in education, still another its nature, and so on all through the period; but the recitation didn't seem to lead to any definite goal save the acquisition of knowledge. Happily, though, it did lead someone to see the real problem involved and to state it as the next assignment. It was put in this form: How can we develop initiative in our pupils? The point to note is that this problem assignment grew out of the recitation and gave direction to future effort. One can readily see how superior the latter assignment is over the former. The discussion in the second recitation took the following practical direction as an effort to solve the above problem:

1. The problem method of teaching develops initiative.
2. The project method of teaching will help in this direction.
3. Self-initiated interest is a condition for initiative.
4. Appropriate subject-matter presented on the level of the learner's experience will lead to independence and spontaneity.
5. Mastery of the subject-matter will help.

From the very beginning one could see the problem involved and appreciate the contribution made by each pupil to its solution. Every response was pointed and advanced the discussion.

DEFINITION

The lesson assignment is the task given to the pupils to be performed. It is the first step in study and hence is the first step in the recitation. It may be the solving of a problem, the reading of a poem for a purpose, the gathering of material on a topic, the mastering of subject-matter in a certain chapter in some book, the review of a bulletin with the purpose of collecting information on a topic, and so on.

Taking the story of Joseph as a basis for assignments, here are a few that might be made, suitable for silent reading lessons.

1. Read the story for oral reproduction.
2. Read the story to find out the larger units of thought.
3. Read the story for the purpose of organizing material in the form of a drama.
4. Read the story to answer a series of thought-provoking questions.
5. Study the story to find out what part Providence played in the life of Joseph.
6. Read the story to find out how Joseph became prime minister of Egypt.
7. Study the story with the purpose of seeing the artistic part of the dreams.

PREREQUISITES OF AN EFFECTIVE ASSIGNMENT?

First, the teacher should know the ability of his pupils, their previous training and present knowledge. This prerequisite will obviate danger of an assignment beyond the comprehension of the pupils. One of the most unreasonable things a teacher can do is to assign a problem that the pupils can neither work nor understand after it is worked. It is the same mistake we make when we ask questions the answers to which call for the use of material not in the possession of the pupils. In asking questions and in assigning problems teachers should know that the pupils have a sufficient background of knowledge to answer the question or solve the problem.

Teachers make a serious mistake in giving assignments beyond the abilities of their pupils, or calling for information and data not in their possession and not available. I heard a sixth grade teacher make this assignment a short time ago: "Please write a paper of five hundred words on the opportunities of women today." This assignment was not only beyond the mental capacity of the children, but they had no interest in it whatever. Neither did they know where to go to find material on the subject. The teacher made no effort to motivate the assignment. *It is easy enough just to make an assignment.* Let us not forget that if the assignment is not self-motivating, it must be motivated in order to get satisfactory results. Someone has well said that to assign a lesson in accordance with the ability of the class requires judgment, knowledge, and a large measure of conscience.

The second prerequisite of an effective assignment is a clear understanding of the subject-matter involved. Not only should the teacher understand the

subject-matter thoroughly, but he should review it before making the assignment in order to refresh his memory. Without such thoroughness teachers may fail to see the main problems, or be unable to see relationships or frame thought-provoking questions. Teachers should also know the difficulty of an assignment and the amount of work it calls for. "In order to assign a lesson well," says Roark, "the teacher must not only know the textbook used but must know the subject-matter also."

CHARACTERISTICS OF AN EFFECTIVE ASSIGNMENT?

First, an assignment should be concrete, not abstract. Instead of asking children to find out how cities get their water, ask them how their own city or town gets its water.

Second, an assignment should be definite, not indefinite. Instead of asking them to study about Joseph, ask them to find out how he became prime minister of Egypt. Instead of asking them to study about leaves, ask them to find out what part leaves play in the life of the tree.

FORM OF THE ASSIGNMENT

An assignment may be in the form of a project, a statement, a type, or a problem. The most effective assignments are usually in the form of a problem. Even the project should involve a big problem. A statement would be more effective in the form of a question. Problems and questions stimulate thinking; hence it is always better, when possible, to express our assignments in the form of a question or a problem. The illustrations that follow will show this quality.

What is the relation between the
acc. and MOTIVATION OF THE ASSIGNMENT

Motivation is not a part of the assignment, but it is a necessary accompaniment. Its aim is to make the assignment effective, to give it a setting, to create an interest in the task to be performed, to recall related experiences, and to make the child feel a need for the accomplishment of the task. It is easy to make assignments, but difficult to motivate them. *As far as possible assignments should be self-motivating;* in such cases the teacher simply works to intensify the interest. If the assignment is not self-motivating, the teacher will have to furnish a motive.

ILLUSTRATIONS OF ASSIGNMENTS

In a certain recitation on "Mother" recently observed, the teacher closed with the following appropriate assignment: "Be able to tell us the next time we talk together how you helped your mother, what kind thing you did for her, etc. Bring in a picture showing a mother in her home."

This assignment has some good features. In the first place, it is a natural outcome of the preceding recitation. It also advances the topic along a very practical line. There is no motivation; the task is self-motivating for first grade pupils.

In the second place, the assignment correlates oral composition with a social subject nearest to the child. Whenever possible, assignments should provide for productive correlation. This provision is one of the chief characteristics of effective teaching.

The following assignment is rich in correlations: "Notice all the kind things you see your playmates do to-day, and be ready to tell us about them when we talk about kindness and politeness."

It deals with a very important social activity, oral expression, morals and manners. The following assignments in the form of problems were worked out by the teachers of the Fredericksburg (Va.) State Teachers College. They deal with local communities.

OUR COMMUNITY

Problems:

1. How did our community come to be settled?
2. What conditions favored the settlement of the community?
3. What conditions favored the development of our community?
4. How do the people of our community get their food?
5. How do the people of our community get their clothing?
6. How are the houses in our community built? Where do we get the materials?
7. How do the people make their living? Study the occupations and industries of the community.
8. How are our roads constructed? Where do the roads go? (If the school is located in a town or city, streets should be studied and named.)
9. How are the things brought into our town or community? Study transportation.
10. What advantages in schools and churches do we have in our town or community?
11. How is the community governed? What are the duties of the police department (sheriff or constable in the rural district), fire department, health department?
12. Why is our community a good place in which to live?

The first example of problem solving in Chapter VII (page 66) is based upon an excellent assignment. Please refer to it.

The problem form of assignment is probably the most effective one we have. The problem is a challenge to thought. It motivates itself. And then its solution leads to orderly and systematic thinking. *In*

using the problem method of teaching one should see that the pupils hold the problem in mind until it is solved and that no irrelevant material be admitted. All material and facts offered must satisfy this test: Does the material contribute something to the solution of the problem? If not, it should not be admitted.

Note again the assignment and motivation connected with the lesson plan on "The Angelus" found in Chapter IV; the assignment and motivation connected with the lesson plan on "My Dream" in Chapter V; also the assignments and motivations connected with the county projects in Chapter VI. All these were effective and deserve careful study.

For definiteness and fullness and help in removing all difficulties, the following spelling assignment worked out by Professor J. E. Avent of the University of Tennessee is excellent. For complete plan see Lesson Plan No. VII in Chapter XVII of this book.

Assignment:

1. For the next time we have eight words, page 102. Really only four, as half of the words are spelled much like the other half. What differences do you observe?

2. Lesson 55, Fourth Grade Part, New World Speller. (This adds to the definiteness of the assignment.)

3. Note the change in spelling *full*, when it is made a syllable of another word. How many "l's" in it? In *pity* what change is made in "y" before adding "ful"?

4. We want to know four things about these words:

- a. How to pronounce each word by syllables and as a whole.
- b. How to spell orally each by syllables and as a whole.
- c. How to write each word as a whole.
- d. How to use each word in a sentence.

I will show you how to pronounce each word. I will pronounce each word for you, and then you pronounce it after me. This way—pit'y, pity, and so on for the other words.

This assignment is short, definite, and really helpful. If this were true of our assignments in general, we should get much better results.

QUESTIONS

1. What relation exists between assignment and motivation?
2. What is meant by an assignment being self-motivating?
3. What are the prerequisites of an effective assignment?
4. What are some of the most common mistakes in making assignments?
5. What are the most important psychological principles involved in making assignments?
6. Read "The Vision of Sir Launfal" and then make some important reading assignments.
7. Why is it important to know the abilities of the pupils and to understand the subject-matter in making assignments?
8. What are some of the important characteristics in an effective assignment?
9. Select some topic and then put it in the form of a problem assignment.
10. What is meant by a county or district assignment?
11. Study the subject-matter on the New England States in some good geography and then find some problem around which you may organize all the important subject-matter connected with these states. Write out the solution of the problem in an outline form.
12. What are the purposes of an assignment?

REFERENCES

Earhart: *Types of Teaching*, Chapter VIII. Houghton Mifflin Co., Boston.

State Course of Study for Rural and Elementary Schools. Department of Education, Richmond, Va.

CHAPTER XII

Other Standards

Preparation of Pupils; Care of Routine; Mental Alertness;
Social Activities; Fixing Definite Results.

The above standards for judging the efficiency of a recitation are not considered of first importance. They are found low in the ranking given in Chapter II; yet supervisors and teachers should be acquainted with them.

Preparation of pupils. There are two reasons why "preparation of pupils" is not considered an important standard; first, it belongs to home study or to a period before the recitation proper; second, "preparation of pupils" can be seen through other more important standards, such as self-initiated interest, spontaneous attention, accuracy and adequacy of response, each of which belongs to the recitation proper. It is not well to multiply standards; the best practice is for the supervisor and teachers to agree on a few definite standards and then to make themselves skillful in using them as soon as practicable.

Care of routine. This important factor of the teaching process as a whole can hardly be considered a part of the recitation proper. It is really a condition for successful teaching and for this reason cannot be disregarded. It relates to all the preliminaries of the recitation, such as the adjustment of shades, the regulation of temperature and ventilation, the orderly as-

sembling of the class, the distribution of the equipment and material, the preparation of drawings and outlines, the collection of work, etc. As soon as practicable, routine matters should be reduced to automatism so that as much time as possible may be given to the constructive phases of the recitation. Care of routine implies good housekeeping.

Mental alertness. We are just beginning to appreciate the time element in school performances. The traditional examination was a test of four or five hours; as a rule the pupil had as much time as he desired. Now the pupil is ranked according to the amount of work he does within a certain time. For many reasons pupils should be timed in many of their tasks. This practice develops speed, quickness of response, mental alertness, and trains the pupil to appreciate the time element in his performances. Pupils usually take as much time as the teacher will allow.

Social activities of the recitation. We need team work in the recitation just as we do in playing a successful game of football or baseball. The recitation should be regarded as a social effort calling for the sacrifice of individual desires and preferences for the good of the class as a whole. In a democracy like ours we have to work together, cooperate. The recitation should, therefore, develop this element of character.

Frequently the class should be divided for the purpose of undertaking tasks as groups, report to be made to the class later.

SOCIAL RECITATION

On one occasion I had the privilege of observing a seventh grade class working out a project to serve a Thanksgiving dinner to a needy family. The first

step the class took was to send a group of pupils to the home to talk with the different members of the family in order to get some ideas as to what articles of food should be served. One of the most interesting features of the project was the report this group made to the class as a whole. Not only was the report interesting but it was the basis for reasonable procedure. The members of the class could then discuss with some intelligence the appropriateness or inappropriateness of certain dishes. After the class decided on the different articles of food that should be served they separated into groups and assigned each group certain articles of food to prepare. Each made its contribution to the dinner as a whole. The project was a great success and was a convincing argument of the many values of the socialized recitation. The project developed some of the finest qualities of character, such as cooperation, sympathy, good will, unity of purpose, initiative, etc.

ANOTHER EXAMPLE

Another social project of a different type came under my observation while I was supervisor of the Pulaski schools. The second year high school pupils decided to present the story of Joseph in the form of a drama. The pupils took the initiative. They did most of the planning and all of the execution. The teacher was a guide, not a dictator. The biggest task of the pupils was to decide upon the acts and scenes. After the matter had been discussed in several group meetings and in one or two class meetings the following organization was agreed upon:

Purpose: Presentation of the noble character of Joseph.
Setting: Canaan and Egypt.

PLOT SCHEME

Act. I. Joseph sold into Egypt.

Scene 1. Joseph's dreams.

Scene 2. Joseph's visit to his brothers.

Scene 3. Joseph in the pit.

Act II. Joseph in Potiphar's home.

Scene 1. Joseph a slave.

Scene 2. Joseph an overseer.

Scene 3. Joseph under false charges.

Act III. Joseph a prisoner.

Scene 1. Joseph behind bars.

Scene 2. Joseph as a jailor.

Scene 3. Joseph as an interpreter of dreams.

Act IV. Joseph, Governor of Egypt.

Scene 1. First visit of Joseph's brethren.

Scene 2. Second visit of his brethren.

Scene 3. Joseph's reception to Jacob and his household.

After working out this scheme, the pupils assigned the characters to the different members of the class, began to practice, decided on the stage setting and finally presented a beautiful play.

CHARACTERISTICS OF A SOCIALIZED RECITATION

Children Speak:

1. To the entire group.
2. Loudly enough for every one to hear.
3. Clearly and distinctly.
4. They arrange their subjects, predicates, phrases, and sentences so that their meaning will be clear.
5. They avoid waste of time by keeping to the point, leaving out unnecessary details, avoiding too much repetition, and knowing when to stop.

Fixing definite results. Charles McMurry, in *The Method of the Recitation*, says: "The mastery of the few general truths of a study must remain the direct purpose of instruction in each branch of knowledge."

This is certainly one important goal of the recitation, but it isn't the only goal. It should end with some generalization, the development of some habit or attitude, the deepening of some interest, or the application of some rule or principle. One of the defects of our present teaching is stopping short of automatism, or failing to fix the generalization through application. The recitation should advance the class in some way, end with some truth, develop some habit, or make more permanent some interest or attitude.

QUESTIONS

1. Do you consider the preparation of pupils a part of the recitation? Do you think it a good standard for judging the efficiency of a recitation?

2. What other standards of the recitation reveal the preparation of pupils?

3. What does the "care of routine" mean? What relation does it bear to the recitation? Why is it important?

4. What is your idea of mental alertness? How can we develop quickness of response?

5. What is meant by a socialized recitation?

6. Describe a socialized recitation from your experience.

7. What are the chief values of a socialized recitation?

8. What are the dangers of such a recitation?

9. What are the characteristics of a socialized recitation?

10. What relation has "fixing definite results" to the recitation?

11. How can we be sure to fix in the mind the important things of a recitation?

REFERENCES

Parker: *Types of Elementary Teaching and Learning*, Chapter IX. Ginn & Co., New York.

Betts: *Social Principles of Education*, Chapter II. Charles Scribner's Sons, New York.

CHAPTER XIII

Habits of Study

It is generally conceded by our best educational authorities that the most important function of the recitation is to develop permanent habits of study. Success in high school and later in college depends more upon ability to study than upon quantity of information; elementary school pupils who have learned how to study have little trouble later on.

NATURE OF STUDY

Study is thinking, and thinking is seeing relationships. When Newton lay under the apple tree and watched the apples fall to the ground, he began to reflect and to see relations between the apples and the earth, between the earth and other objects, between object and object until he worked out our present law of gravitation. Yes, study is seeing relations. McMurry calls it "the work that is necessary in the assimilation of ideas, . . . the vigorous application of the mind to a subject for the satisfaction of a felt need."

Strayer and Norsworthy say:

"Study is thinking. What makes for good thinking makes for good study. Study is controlled mental activity working toward the realization of a goal. It is the adaptation of means to ends, in the attempt to satisfy a felt need. It involves a definite purpose or goal, which is problematic, the selection and rejection of suggestions, tentative judgment, and conclusion. The mind of the one who studies is

active, vigorously active, not in an aimless fashion, but along sharply defined lines."

Strayer and Norsworthy also say:

"Power to study is of very gradual growth. It must proceed slowly, from simple to complex, from easy to difficult problems, from situations where there is close supervision and directions to situations where the student assumes full responsibility. Knowing how to study is not an inborn gift—it does not come as a matter of intuition, nor does it come in some mysterious way when the child is of high school age. It is governed by the laws of learning, of exercise and effect, just as truly as any other ability is."

From the above definitions, then, we learn that study is thinking, and that thinking is seeing relations. We also note that effective study calls for the stimulus of some goal to be reached, the presence of a worthwhile problem, the satisfaction of a felt need. This brings us to the big problem of this chapter: What are the study-habits that we should not fail to make permanent?

The following list of study habits was worked out by a class in the University of Chicago:

STUDY-HABITS

1. Clear, straightforward, constructive thinking by the pupil.
2. The problem-solving attitude.
3. The careful selection of data.
4. Ability to weigh values accurately without prejudice.
5. Power to organize material and ability to draw accurate conclusions.
6. Willingness to suspend judgment for further evidence.
7. Spirit of inquiry and investigation.
8. Willingness to accept truth and its consequences.
9. Willingness to step out on new platforms of thought.
10. Habit of independent thinking.

This splendid list deserves careful consideration.

On the basis that one of the chief functions of the recitation is to develop permanent habits of study, it will be well to discuss more in detail the important phases of study.

DEVELOPING STUDY-HABITS

1. *The Problem-Solving Habit.*

The first step in thinking is the discovery of some problem, the solution of which satisfies a felt need. If possible, the pupils should be led to discover the problem and to find a sufficient motive for attacking the problem.

Earhart has the following to say relative to the basis of study-habits:

"In the various forms of teaching exercises described in this book, we have found the starting point to be the realization of some need to be satisfied, some problem to be solved. This consciousness of an end to be reached is the starting-point of purposive, or logical, thinking. Since study in its higher forms involves thinking, its beginning also must lie in the feeling of need, in seeing that some end not now present must be reached. In other words, study originates in the consciousness of a motive and this we call the first step in the process."

There is little trouble in getting pupils to think when they feel that their problems are worth while and are really life problems of to-day.

In Chapter IV we have an example of a worth-while problem. There children were asked to write compositions, using "The Angelus" as a basis, of sufficient merit to be used as models in a Course of Study. In the county projects described in Chapter VI the pupils were asked to write compositions worthy to be exhibited at the County Fair. In these two assignments we have problems worth while in the eyes of the pupils,

problems tied up with real life and effectively motivated. For these two reasons the results were highly satisfactory.

PROBLEM DISCOVERY

A short time ago the writer visited a school where he found the pupils interested in illiteracy. They had gathered some valuable information on the amount of illiteracy in the United States; the difference between absolute and near illiteracy; the difference between the standards used by the Federal Census Bureau in determining illiteracy and those used by draft boards; native and foreign illiteracy; rural and urban; but they failed to see any present problem in it all. Collecting the material and presenting it to the class seemed to be the end. The responses of the pupils were fairly satisfactory, but the recitation lacked directed movement. There was no goal to be reached, no problem to be solved.

Finally, the teacher put this question: "What shall we do about it?" This led to the discovery, on the part of the pupils themselves, of this very live, present-day problem: "What can we do to overcome illiteracy?"

The teacher gave this as a new assignment and asked the pupils to come to class prepared to offer suggestions as to means of overcoming the evil. This problem led to increased interest, new lines of thought, application of information already gathered, and new organization of material. During the second recitation the pupils discussed such topics as these: vacation schools, moonlight schools, compulsory education, the improvement of the one-room school, child labor laws. These topics were discussed, of course, in their rela-

tion to the problem. Each response made some contribution to its solution. The recitation was unusually interesting. Yes, we must certainly train pupils to think in terms of problems.

2. *Training Pupils to Make Workable Hypotheses.*

After discovering the problem and understanding it thoroughly, the next step in thinking or in studying is to form a theory, or a hypothesis, and try it out in the solution of the problem.

MUNICIPAL PROBLEM

A few years ago a certain municipality had serious trouble with its public utilities. The light, street car, and water service was very unsatisfactory. The citizens realized that something had to be done. The private corporation that had charge of the public utilities was in financial straits and was unable to make any improvement. A group of interested citizens came together to consider this one problem: "What can be done to improve conditions?"

Considering all possible ways of adjusting matters satisfactorily, they finally decided that municipal ownership was the only remedy. A special committee was appointed to investigate the success of municipal ownership in other towns. The report of this committee was favorable. The Council declared an election for a bond issue of \$250,000 with which to buy the utilities. The bonds carried and the town now owns the power house, the car line, and the water system and is giving the people splendid service.

Almost any difficult problem can be solved if we are willing to put time and thought upon it. If we will make reasonable hypotheses and try them out, we shall in most cases find a solution.

3. *Collecting and Valuing Material.*

After discovering a real problem and formulating a working hypothesis, we must train pupils in collecting relevant material. This calls for judgment, weighing values, and drawing conclusions. Pupils should be trained in testing the relevancy of data with such questions as these:

- (1) Is the material related to the problem or topic?
- (2) If related, is it of sufficient importance to be used?
- (3) Is the illustration apt?
- (4) Is the comparison appropriate?
- (5) Does the story have point to it?
- (6) Is the example a parallel case?
- (7) Does the material contribute to the solution of the problem?

If the material fails to square with these tests, it should be rejected. So often pupils forget the problem or the topic under consideration and use just any material without regard to its relevancy or its value.

Another important point in collecting data to solve a problem is this: How can we find material for solving problems?

We can do this—

- (1) By reading books, magazines, gazetteers, year books, biographies, etc.
- (2) By reading reports of special committees, surveys, experimentations, and investigations.
- (3) By consulting other people to find their experiences and their own personal views.
- (4) By recalling one's own experiences and one's own knowledge of the subject.
- (5) By observing examples.
- (6) By consulting authorities.
- (7) By experimenting with hypotheses.

4. *The Habit of Organizing Material.*

This is one of the standards used by McMurry in evaluating the efficiency of teaching in New York City.

He and his co-workers watched for evidences of orderly thinking and orderly presentation of data on the part of the pupils, not on the part of the teacher. It is important, of course, for the teacher to think in an orderly way but it is more important for the pupils to develop this habit. If they have the habit, we know the teacher has the habit. *We cannot overemphasize the importance of judging the teacher by the performance of the pupils.* A great deal of practice should be given in organizing material for presentation either in oral or written compositions. We must be sure that we develop the habit of thinking in terms of some specific problem, topic, or project. We must be sure, too, that we develop the important habit of sticking to the point.

I observed a high school teacher develop a very effective organization of this subject not long ago: "The Importance of the Boy-Scout Movement." She and the pupils worked out the following outline together:

BOY-SCOUT MOVEMENT

I. Introduction:

1. It started in heroic service in South Africa during the Boer War.
2. Because of its service in Africa it was planted in England and more highly developed.
3. It spread to America because its principles seemed to meet a felt need in the boy's life in England.

II. Its practical workings:

1. It presents a progressive program for growth and development in passing from a lower to a higher class.
2. Its motto develops a social habit of great value.
3. The Scout oath develops faith in God and loyalty to one's country.

III. Its moral values:

1. It develops a democratic spirit in its members.
2. It develops a passion for heroic service.
3. It develops a group of practical outdoor habits.

IV. Generalization:

The Boy Scout movement makes a boy a better member of the home, a better member of the church, and a better member of the community.

At a later date the writer listened to several members of the class speak, using this outline, and looked over the written compositions of all. The responses were highly satisfactory. One reason for this, of course, was the splendid outline worked out before any attempt was made to speak or write.

As an example of organization of subject-matter in the form of a project the following outline worked out by the Fredericksburg State Teachers College may serve as a model:

PROJECT: EXCURSION TO A WATERFALL

(1) *Introduction.*

Has anyone ever seen a picture of Niagara Falls? What is a fall? Is there one in our community? How would you like to pay a visit to this particular fall?

(2) *Excursion, visit to the fall.*

Note the fall and the ledge of rock over which it tumbles. Explain about rock formation, rock weathering, and soil formation; frost and tree root action. Note the bluffs towering above the fall. Study the dam and show how the fall is a source of water power. How is the power used? Visit the power house and mill turned by water.

(3) *Class work.*

As an assignment let the class read in geographic readers everything they can find about rivers, brooks, boats, falls, hills, valleys, and anything connected with their trip. After reading silently a de-

scription or story, let each one tell to the class what has been read.

(4) *Language lesson.*

Let the class tell or write in single sentences any interesting things connected with the trip.

(5) *Sand table.*

Let a group work out on the sand table their ideas concerning some feature of the trip.

A good deal of space in this book is being devoted to the organization of subject-matter. Each lesson plan gives us an example of organization. Chapter VII shows how we can organize our material around some problem, one of the best forms of organization.

5. *The Habit of Deferring and Testing Conclusions.*

It is not safe to commit one's self to a conclusion without testing it.—Is the sum of this column of figures correct? Let us not accept it until we test it by crossing out the 9's. Before we accept this value of x , let us substitute it in the equation to find out whether the value will work or not.

We are told now that the *whole method* in memorizing is much more economical and effective than the *part method*. If you have any doubt about this conclusion, try it out yourself. We need to develop this experimental attitude on the part of our young people.

The Dalton method of instruction may be an improvement over old procedure, but I may not be ready yet to accept this conclusion. I may desire to wait for further experimentation. Earhart suggests that we develop this attitude in our pupils: "Do we know enough about this matter before us to come to a definite and final conclusion?"

Would it be well to investigate further before accepting a conclusion as final?

Another quotation from Earhart says:

"Pupils sometimes have to be almost compelled to take note of inaccuracies in the recitations of their classmates. They should frequently question statements made, should differ radically, and should see that conclusions are not justified because of lack of evidence. In these situations, the teacher so frequently does all the work that pupils learn to be passive. If permitted and aided they will soon learn to watch the work of their classmates, to argue, and to maintain that conclusions are either incorrect or are based on insufficient evidence."

Pupils need to develop the habit of testing their own conclusions as well as the conclusions of others. They need to put such questions as these to themselves: How can I verify this conclusion? What experiment will prove or disprove the answer? If this conclusion is correct, what results should follow?

We must, then, not only develop the habit of looking for worth-while problems, of forming hypotheses and trying them out until the problem is solved; we must also develop the habit of collecting and organizing relevant facts and material as a basis for forming judgments. These should be accepted as final only after careful testing and verification.

QUESTIONS

1. State some facts that show the importance of study habits.
2. What value did high school principals who were questioned place upon this standard?
3. What is the nature of thinking?
4. What are the conditions for effective study?
5. Is power to study an inborn gift or is it developed?
6. Mention ten of the most desirable habits of study.
7. What is meant by the problem-solving habit?
8. What are the conditions for effective problem-solving procedure?

9. How can we develop the habit of forming reasonable hypotheses?

10. How can we develop the habit of valuing data?

11. Where can we go for material to solve problems?

12. Why is organization of subject-matter so important?

13. What are the most important study habits?

14. How can we develop the habit of thinking in large units of subject-matter, in types, in projects, and in problems?

15. Select a suitable project for a fifth grade and write out the plan you might use in developing it. "Excursion to a Waterfall" gives the idea.

REFERENCES

Burton: *Supervision and the Improvement of Teaching*, Chapter V. D. Appleton & Co., New York.

Earhart: *Types of Teaching*, Chapter XIV. Houghton Mifflin Co., Boston.

Strayer and Norsworthy: *How to Teach*, Chapter XIV. Macmillan Co., New York.

Dewey: *How We Think*. Houghton Mifflin Co., Boston.

Parker: *Methods of Teaching in High Schools*, Chapter XX, IX. Ginn & Co., New York.

Smith: *Teaching Geography by Problems*. Doubleday, Page & Co., New York.

Stark: *Every Teacher's Problems*, Chapter XVI. American Book Co., New York.

Strayer: *Brief Course in the Teaching Process*, Chapter VIII. Macmillan Co., New York.

CHAPTER XIV

Maintaining Order and Discipline

Someone has well said that "the want of order is the great master defect of nearly all schools." I know of no one thing which so powerfully counteracts the exertions of teachers as the want of good discipline. Dr. D. P. Page puts it this way: "Order is heaven's first law, and it is scarcely more essential to the harmony of heaven than it is to the happiness and success of the school."

In a conference of superintendents at the Radford State Teachers College not long ago this question was put to them: "What are the chief causes of failure among Normal graduates?" Many causes were given, but the superintendents were of one opinion in holding that the most frequent cause was inability to maintain order and discipline. In view of this verdict of school officials we come face to face with this practical problem: "How can we assist teachers in maintaining order and discipline?" How can we strengthen the teaching profession at this point?

The rest of this chapter is a contribution to the solution of this ever-present problem.

SCHOOL DISCIPLINE

1. *The presence of a high standard of order and discipline will help.* The following statement may serve as a kind of ideal: Discipline implies perfect control

on the part of the teacher and perfect obedience and cooperation on the part of the pupils in securing and maintaining conditions most favorable to concentration of attention and reflective thinking on the part of the class as a whole. With this ideal as a kind of goal toward which to work a young teacher ought to become stronger and stronger as a disciplinarian.

2. *The teacher must have full and unhampered authority.* He is responsible for discipline; hence he must be clothed with authority sufficient to secure and maintain such conditions as the welfare of the class as a whole demands. Make a point to control your room yourself; no one on the outside can do that for you. It may become necessary for you to advise with your principal or your superintendent; such procedure is all right, but you must have confidence in your own powers and must depend upon them. It is very dangerous for a trustee to interfere as an individual or an official. The principal should be slow also to interfere.

3. *Use corporal punishment as a last resort.* Dr. Page sums up this phase of discipline in this excellent paragraph:

"The true way and the safe way, in my opinion, is to rely mainly on moral means for the government of the school, to use the rod without much threatening if driven to it by force of circumstances, and as soon as authority is established to allow it to slumber again with the tacit understanding that it can again be awakened from its repose if found necessary. The knowledge in the school that there is an arm of power may prevent any necessity of an appeal to it, and such a knowledge can do no possible harm in itself. But if the teacher has once pledged himself to the school that he will never use the rod the necessity may soon come to him to abandon his position or lose his influence over the pupils."

4. *No teacher should punish the whole class for the offences of one or a few.* Such procedure is not fair to the best pupils in the class, nor is it just. School discipline must be based on justice and fairness. No pupil should be punished unless it is clear that he is to blame. Give him the benefit of the doubt. If he deserves punishment, he will give you another opportunity in which there will be no doubt.

5. *School government should be democratic rather than autocratic.* Limited pupil-participation in the legislative, judicial, and executive activities of the school is highly desirable. Frequently a case of discipline can well be left to the school.

6. *The presence of a wholesome esprit de corps is favorable to effective discipline.* Individual pupils do what the group approves and avoid what the group disapproves. If a school as a whole has studious habits, the individual will soon become studious; if the school as a whole cheats, the individual pupil will soon fall into that bad habit.

7. *Discipline should not be administered under the influence of an emotion.* An offence may look very different to-morrow when you are composed and free of emotion. I once wrote a letter under the influence of anger, but I am glad that I delayed sending it until the next day. Then I refused to send it at all. The same principle is wise in many cases of discipline.

8. *A rich, full, daily program or schedule with the school thoroughly habituated to it will prevent most problems of discipline.* A busy school doesn't think about mischief. Bagley says that, "after yielding all the claims of freedom, independence, initiative, and spontaneity, the best school is the school that runs like a machine."

Such a school is certainly the easiest school to discipline. Along with its rich daily program of work should go an interesting, health-building daily program of play. As a rule a school that plays well studies well, and also behaves well. A full daily program thoroughly mechanized will prevent many of our troubles with absences and tardiness.

In order to help teachers build such a program of work and play I am giving, in the Appendix of this book, a daily schedule worked out by the supervisors' class in the Radford State Teachers College. It is based on the Virginia State Course of Study and provides a well balanced program of work and play. It is mentioned here because it is considered a means of eliminating or reducing punishment. Several other programs for various types of schools are given in the Appendix.

9. *Discipline should be free and easy, not forced.* If the proper relations exist between the teacher and the pupils there will be no need for the teacher to play the policeman.

There is a story of the superintendent who found that one of his men teachers had dispensed with his shoes. When asked why, the teacher replied, "I wanted to slip up on 'em." Evidently he had a very poor conception of school discipline.

One of the most serious mistakes a teacher can make is to parade his authority before his pupils or to flaunt it in their faces. "The best discipline," says Charles McMurry, "is that which is so quiet and natural that it becomes invisible. The teacher's authority is swallowed up and disappears in the proper school activities."

Move about the room quietly, always using your

natural voice. Sometimes it may be necessary to stop all forms of instruction in order to secure absolute quiet. Threatening or scolding a class is a bad habit for any teacher to fall into. Never say what you are going to do if a certain thing happens. Wait until it happens, then act.

10. *All rules should be reasonable and sensible.* They ought to be thoroughly understood and accepted by the pupils. There is no trouble in getting pupils to accept reasonable rules when they feel the responsibility. A rule that is constantly giving trouble probably ought to be abandoned. There is such a thing as being free under law. This ought to be the case with our schools as far as possible.

In the Radford Normal Bulletin known as "Principles of Teaching Practicalized" we find a series of questions asked by teachers and answered by Professor Joseph E. Avent. The following deal with very practical problems of order and discipline:

Question

How would you correct inattention?

Answer

You may do this partially in the following ways:

(a) Read the chapters on "Attention" in Bagley's *Class-room Management*.

(b) Make thorough daily preparation for all your classes.

(c) Be enthusiastic yourself.

(d) Study the children; try to see things from their standpoint; thus try to win the way to their hearts.

(e) Use certain simple routine signals of control, as "30" (hands on lap), "31" (arms folded), "32" (hands back of head), when you wish the attention of all, at the board, in connection with assignments, or when the children are noisy, etc.

If these do not work, deal firmly and quickly with the individual case.

Question

Should children be allowed to talk at all in school?

Answer

I have tried letting them talk with restrictions; I have tried prohibiting them from talking altogether,—both when I taught in the elementary school and in the high school. Out of my experience has grown the following as a safe rule: If you have only a small number, you may let them talk with rather definite restrictions and with your permission for each case. If you have thirty or more children to teach, you had better take the children into your confidence the very first day; say to them that their parents have paid taxes for their education and have a right by law to expect that the children shall work in school without the continual disturbance of others; talking by any except the teacher, unless in recitation or conversation period, disturbs very seriously studying on the part of the others; make your reason just as appealing as possible; then develop your rule against talking, and enforce from the very first day.

Question

What would you do with a stubborn child?

Answer

(a) Be sure that he is stubborn before you proceed to do anything. Sometimes, it is not stubbornness but something else. Twice in my teaching experience, after I had punished a boy for apparent stubbornness, I discovered that what I took for stubbornness was deafness. He had not heard.

(b) A child is not stubborn with one whom he loves. Win his love from the start. Show your interest in his affairs. When he comes to like you, you will find that there is no outburst of stubbornness.

(c) Get the cooperation of the parents.

(d) In the last resort, if you must come to that, the teacher must rule the school. Stubbornness must be overcome as any other evil. You are not going to sit still and let any pupil run the school. The teacher is the authority that must be recognized. Bring about this recognition by a

combination of love and firmness. Force must be used only as a last resort, but it may be necessary in one case out of a hundred. The fewer the cases in which you must use force to bring about the proper respect for your authority, the better you are as a teacher and disciplinarian.

REGULARITY AND PUNCTUALITY OF ATTENDANCE

Questions

In what way may tardiness be remedied?

What is the best way to get children to be on time?

What rules would you apply to correct the habit of tardiness?

How may a teacher instill punctuality?

In what way may a teacher secure punctuality in the schoolroom?

How can you break up tardiness?

Answer

The matter of punctuality is a problem of some importance. I shall answer all these questions in one. Tardiness may be reduced very considerably in the following ways:

(a) Have interesting opening exercises. These may consist of lively singing on the part of the children. A good, interesting story for the children to look forward to will hurry them on to school. Other things of interest that you can do in opening exercises will help.

(b) You will note that nearly all tardiness occurs with the children of just a few families. These families, too, frequently live nearer the schoolhouse than those whose children are always on time. Visit those families and make an appeal to them to let the children get to school on time. Make the points (1) that being late at school builds up bad habits that will continue through life; (2) that a large percentage of the tardiness in your room is caused by the children of that family; (3) that tardiness in any kind of remunerative employment results either in reduction of pay or dismissal from service; and (4) that the child's parents have paid the necessary taxes for schools and that a child should be given the opportunity of every minute of schooling that this tax money purchases.

(c) You might have two calendars, one for the girls and one for boys. Every day on which all the girls reach school "on time" might be marked by a star. The boys' calendar might also be marked in the same way. There could thus be built up a contest between the boys and girls to see which could get the most stars for their calendar each month.

(d) The best way of all is to build up an ideal of perfect punctuality on the part of each individual child. Under such an ideal every child should feel personally responsible for being on time, and he should feel disgraced if he is ever late. I have seen such a spirit of perfect punctuality built up in a room, and even in a whole school, that a child would actually cry if he came in late. Nothing but perfect punctuality would satisfy those children. Work to build up that spirit.

Question

What would you do with children for playing truant?

Answer

This represents one of the exceptional occurrences of school life rather than a frequent one. When I taught in elementary school I used this plan: At the beginning of school, before anybody had had occasion or temptation to run away from school, I talked and explained to all very carefully what truancy meant. I tried to lead them to understand that running away from school was like deserting in the army. Anybody who runs away from duty is a deserter. In the army a deserter is punished very severely. Sometimes he is punished with death, according to the gravity of the offence. In the schoolroom we want every child to be a good soldier. Good soldiers never desert. If any child deserts, if he runs away, if he plays truant, he will have to submit to very severe punishment before he may come back. It is not always necessary that the punishment be administered by the teacher. The parents are sometimes willing to take this disagreeable task off the teacher's hands. At any rate, I would lead them to understand that just as a deserter is punished in the army, so one who plays truant in school will have to be punished before he can get back into school. If there is any misbehavior for which corporal punishment is justified, it is truancy; but I

do not believe in the use of corporal punishment for this or anything else, until you have an opportunity to make it clear to the pupils in advance just what offence will bring corporal punishment. Should a child continue his truancy in spite of punishment by the parent or by the teacher, it would not be proper to retain such a child in school. His example to the others would become bad.

Question

What would you do with boys for smoking on the grounds?

Answer

The following should be done:

- (a) Have a rule absolutely prohibiting it.
- (b) Give them to understand right at the opening of school that it will not be tolerated.
- (c) When the first one violates your rule, take it up with him immediately. Ask him what he is going to do about it, whether he is going to stop it or continue it. If he will promise upon his honor to stop it, you might excuse him for the first offence. If he is a large boy and will not agree to stop, there is nothing to do but to send him home, until he is willing to agree to live by your rules. If he is a small boy, either punishment or the force of the parents will have to be brought into action in order to bring about an agreement to stop smoking. You cannot afford to have any pupil who deliberately refuses to live up to your rules. On the other hand, it is proper not to have unnecessary or unreasonable rules.
- (d) Have an athletic association to which no boy who smokes or swears may belong. Let only members play on the teams.

Question

Should a teacher have many or few rules?

Answer

Do not have a large number of rules. The children will never remember them all or keep them. In going into a new community, it is not well to make more than the few absolutely necessary rules till you have been there long enough to understand the children. There are, of course, a few things that must be put in the form of a rule from the

very first. For example, the time of opening school and of recesses; the manner of coming into the schoolroom from the outside; the manner of passing books, papers, hats, caps, coats, etc.; talking, and the like. The rules that must come first should be of the positive and constructive kind; not of the prohibitive, punitive kind, as a general proposition.

Question

Should we not try to rule always by kindness and not by force?

Answer

Yes, kindness and love are the ways to the heart of a pupil, if you know how to be kind and how to love. They are means that grow on you if you use them. Suppose there should come to your school a child who mistakes your kindness for weakness and who does not appreciate your efforts at love, what are you going to do? While such children are the exceptions, they are none the less real. You learn how to love children by talking to them, by playing with them, by visiting their parents and by being really interested in their affairs. Some of us who do not know a better way must occasionally use "force" as a last resort, with some of our pupils. We will keep our force hidden, till it is time to use it, then we shall use it properly.

QUESTIONS

1. Give reasons why "maintaining order and discipline" is an important standard in judging teaching efficiency.
2. Try to state clearly in your own language an ideal to guide us in maintaining order and discipline.
3. Is it good practice to punish the whole class for the misbehavior of one or two pupils when you cannot find the guilty party? Justify your answer.
4. Explain what is meant by using democracy in school government.
5. Is a teacher ever justified in using corporal punishment? Support your answer.
6. Show how the spirit of the school works for good or bad discipline.

7. What relation exists between the daily schedule and order and discipline?
8. Is an effective school policeman usually a good teacher?
9. Is it good procedure to threaten drastic measures if a certain thing happens? Why?
10. What is meant by freedom under law and order?

REFERENCES

Bagley: *Classroom Management*, Chapters VI, VII, VIII. Macmillan Co., New York.

Stark: *Every Teacher's Problems*, Chapters II, III, IV. American Book Co., New York.

Strayer: *Brief Course in the Teaching Process*, Chapter XV. Macmillan Co., New York.

CHAPTER XV

Self-Improvement by Self-Analysis

In evaluating a recitation one needs a score card listing a few of the most important standards. These should be agreed upon by the teachers, supervisors, and superintendent. It is just as important for the teachers to know the standards with which the recitation is to be rated as it is for the superintendent or the supervisor to know them. It is even well for the pupils to know the standards involving their part in the recitation. It is always better for everybody concerned to understand what is expected.

In teaching and in observation it is highly important to keep teacher- and pupil-activity constantly in mind. Work for a happy balance between these two factors. As a rule, teachers do too much for their pupils. The best recitation is one in which pupil-response is satisfactory. The real function of the teacher is to get the pupil to do his part, to get him to respond adequately and fully. We used to judge a teacher by her performance altogether; we watched her bearing, her English, her skill in presentation, her gifts in story-telling, etc. We were so absorbed in the teacher, we forgot the pupil. More and more the teacher will be judged by pupil-performance; we are going to see her ability through the responses of the pupils. A successful teacher said in the presence of the writer not long ago that she was taking a certain

university course to find out how to shift teacher-activity to pupil-activity. Our recitations must be made more democratic.

The following scheme for evaluating the recitation regards the two factors as of equal importance. The five standards under teacher-activity and the five under pupil-activity are those chosen by principals as described in Chapter II.

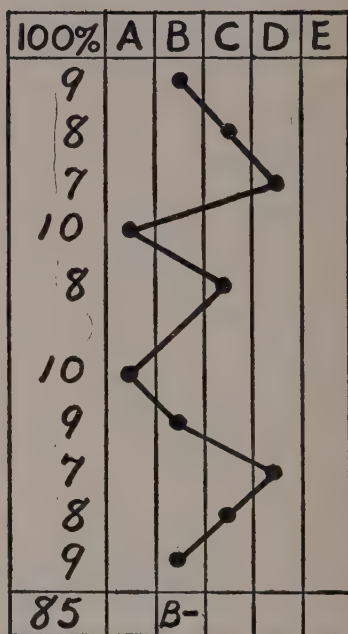
I. Teacher-Activity. (50)

1. Clearness and definiteness of purpose (10)
2. Organization of subject-matter (10)
3. Effectiveness of assignment and motivation (10)
4. Maintaining order and discipline (10)
5. Selection and emphasis of essentials (10)

II. Pupil-Activity. (50)

1. Percentage of attention (10)
2. Initiative (10)
3. Habits of study (10)
4. Self-initiated interest (10)
5. Weighing values (judgment) (10)

General rating of the recitation



EXPLANATION

When the scheme is used with the per cent scale, each item is valued at a possible 10, and the per cents awarded are added to obtain a general rating on the qualities concerned.

However, as indicated by the columns A, B, C, D, and E, this scheme for self-rating is also built on a scale of five steps, the scale commonly used now in rating pupils and teachers. It is arranged so that each standard may be rated. To use it make a point opposite each item in one of the columns to the right. For instance, if the teacher is clear and definite in purpose, give her an A. If she is not, give her a B, C, D, or E, whichever you think she merits, and so on with the other items. After making a point opposite each standard, join the points as shown. This will give a graph showing the strong and weak points of the recitation. This particular graph shows that the teacher is strong in maintaining order and discipline and in the percentage of attention she obtains, but rather weak in effectiveness of assignment and in inculcating habits of study.

SELF-RATING

This scheme may be used by teachers in rating themselves. "Self-improvement by self-analysis" is a very happy phrase. A teacher ought to be her own critic. After a recitation, sit down and put such questions as the following to yourself: Was I clear in my purpose? Was the subject-matter appropriate and well-organized? Did I deserve an A, B, C, D, or E for this particular factor? Did I distinguish between essentials and non-essentials? Was my assignment simple, clear, and definite, well motivated? Was the order satisfactory? What per cent of attention did I have? Was the interest keen, self-initiated, or was it forced? Did the recitation give opportunity to develop initiative, originality, independence, and self-reliance? Was any habit fixed or skill automatized?

Were the responses of pupils adequate and satisfying? Was there a proper balance between teacher- and pupil-activity? Were the pupils considerate of others? Was it democratic or autocratic? Did the pupils feel a part of the responsibility for the success of the recitation? Did they feel free to ask questions, to make suggestions, and to offer problems? Were there evidences of teamwork on the part of groups or on the part of the class as a whole? Did the pupils show a friendly attitude toward the teacher, toward the class, and a desire to help? Were my questions thought-provoking questions?

Such a self-rating is bound to result in growth.

RATING BY OTHERS

Get your superintendent or supervisor to rate your work. Don't be afraid of either of them; they are your best friends. It is generally agreed now that teaching should be rated at times by competent supervisors in order to improve instruction and to stimulate professional growth. Ask your friends to rate your work also. Such ratings will help you to get rid of objectionable practices and strengthen your strong points.

OBSERVATION OF INSTRUCTION

In visiting a classroom for observation and evaluation of instruction one should have in mind the most important things to be looked for. In other words, the observer and the teacher should know the most important characteristics of good teaching and should be able to recognize and appreciate them. The following scheme is suggestive.

A SCHEME FOR OBSERVATION OF INSTRUCTION

	GRADE			
	Poor	Fair	Good	Excellent
I. General Observation.				
1. Physical conditions of the room				
2. Physical conditions of the pupils				
3. Gradation of the pupils				
4. Preparation of the pupils				
5. Maintenance of order—free or forced.....				
6. Preparation of teacher				
7. Devices employed by teacher				
8. Personality and character of teacher.....				
9. Technique of the teacher				
10. Organization and presentation of subject-matter				
11. Attention—free or forced				
II. Observation of results.				
1. Habits of thought:				
Ability to concentrate				
Independence				
Self-reliance				
Clear and purposeful thinking				
Ability to analyze and solve problems, etc.....				
2. Habits of study:				
Zeal in attacking problems				
Intelligent procedure in study				
Persistent effort				
Careful planning				
Nature of reading				
Reflective attitude				

A SCHEME FOR OBSERVATION OF INSTRUCTION (Continued)

	GRADE			
	Poor	Fair	Good	Excellent
3. Social habits:				
Cooperative self-control				
Consideration for others				
Generosity				
Attitude of pupils to-				
ward teacher				
Attitude of pupils to-				
ward the group				
Attitude of pupils to-				
ward the school				
Attitude of pupils to-				
ward the recitation.....				
Willingness to contrib-				
ute toward the suc-				
cess of the class.....				
4. Motor habits:				
Adjustment of plans.....				
Clear expression				
Posture in sitting.....				
Posture in standing				
and writing				
Posture in passing the				
line, etc.				

The following scheme is used by the University of Chicago for grading the work of student-teachers. It will be helpful to any teacher in evaluating her own work.

SCHEME USED BY THE UNIVERSITY OF CHICAGO

	A	A-	B	B-	C	F	Remarks
1. <i>Success in lesson plan-</i>							
<i>ing.</i>							
a. Clearness of pur-							
pose, motivation							
b. Choice and organi-							
zation of subject-							
matter							

SCHEME USED BY THE UNIVERSITY OF CHICAGO (Continued)

	A	A-	B	B-	C	F	Remarks
c. Emphasis of essentials and appreciation of values							
d. General arrangement plan							
e. Neatness							
f.							
g.							
2. Skill in presenting the units of instruction.							
a. Gaining and holding the attention of the pupil							
b. Securing and fixing definite results.....							
c. Economizing time							
d. Meeting individual differences							
e. Assigning lessons.....							
f.							
g.							
3. Classroom management.							
a. Maintaining discipline							
b. Care of routine							
c. Fostering of group spirit							
d. Attitude toward pupils							
e. Tact							
4. Personal fitness.							
a. Health and energy							
b. Sense of responsibility							
c. Initiative and self-reliance							
d. General bearing							
e. Command of language							

The following score card is used by the University of Chicago for evaluating the drill type of lesson. It

should prove helpful to teachers in evaluating drill work both in the recitation and in the study period.

DRILL PROJECTS

GRADE: *Poor, Fair, Good, Excellent*

	Score
<i>Pupil-Activities in Drill Work</i>	
1. Ability of the pupils to discover their own needs for drill.....	
2. Their ability to devise ways and means of accomplishing the desired results of drill work	
3. Their ability to set up definite standards of attainment.....	
4. Their ability in sustaining their original purpose through repetition and practice until the desired results are secured.....	
5. Their ability to use the results of drill work in working out projects and in solving problems	
<i>Teacher Activities in Drill Work</i>	
1. Skill of the teacher in discovering specific needs for drills	
2. Her ability in deciding what types of drill are needed	
3. Her ability in stimulating pupils—	
a. To set up definite standards of attainment	
b. To set up practical standards of accuracy and speed, which are high enough to require good effort but not high enough to discourage them	
c. To devise ways and means of accomplishing the desired results	
d. To sustain their original purpose through repetition and practice until the desired results are secured.....	
e. To use the results of drill in working out projects and in solving problems.....	
4. Her ability in securing repetition with maximum attention—	
a. By variation in the procedure.....	
b. By placing a time limit.....	

DRILL PROJECTS (Continued)

	Score
c. By using the incentive of emulation	
d. By having each pupil compete with his own record	
e. By having each pupil measure his work with the results of standard tests	
f. By the teacher keeping herself wide awake and attentive to the pupils' work	
5. Her ability in limiting training when standards are reached.....	
6. Her ability to recognize and minister to individual differences	
7. Her ability in maintaining drill exercises until constancy in accuracy and speed is secured.....	
8. Her ability in grading the pupils. Does she use the normal curve of distribution?	

SELF-IMPROVEMENT BY SELF-ANALYSIS

(Used by the University of Chicago. Some questions have been added.)

HOW TO GROW IN TEACHING POWER

1. Analyze the results of your own efforts to determine those characteristics of your teaching which interfere most seriously with your maximum efficiency.
2. Set up an ideal or goal of attainment relative to these handicaps.
3. Then strive persistently and consistently to attain your goal.

PROBLEMS IN METHOD WHICH MAY
SUGGEST YOUR HANDICAP

1. How can I secure a more thorough mastery of the subject-matter to be presented?
2. How can I make my written plans of greater value in preparing for class teaching?
3. How can I improve the organization of subject-matter?

4. How can I present the new lesson unit so as to emphasize the most essential points more effectively?
5. How can I complete the assignment in the time allotted for the recitation?
6. How can I adapt instruction to meet the interests, needs, and capacities of individual pupils?
7. How can I inspire and direct the pupils during the recitation more effectively?
8. How can I develop confidence, decision, and positive leadership as a teacher?
9. How can I develop a studious attitude on the part of the children?
10. How can I secure a free, yet dignified, discussion on the part of the children?
11. How can I make the recitation move forward quickly and to the point?
12. How can I improve the form and effectiveness of my questions?
13. How can I reduce my own activity in the recitation and, at the same time, increase pupil-activity?
14. How can I change the work at the board so as to make it more effective?
15. How can I keep the class working as a unit and give attention to individual needs at the same time?
16. What changes in my method of presenting subject-matter should be made in order to secure quicker and richer generalizations?
17. How must I change the form of the recitation so as to secure better application?
18. How can I make the drill more effective?
19. How can I make use of illustrations, objective material, etc., in order to clarify the difficult points of the lesson more effectively?
20. How can I improve the classroom management to secure greater economy of time and added efficiency?

In evaluating the teaching process it is helpful to consider the practices of superior teachers. In answering the question "What do the best teachers do under given conditions?" the following list should be of use:

PRACTICES OF SUPERIOR TEACHERS

1. They emphasize a few important issues during each recitation. Do not try to teach too much. Sometimes good practice places emphasis on a single big idea or issue.

2. Superior teachers avoid talking too much. They get the pupils to talk; they know that their success depends upon pupil-performance more than upon teacher-performance.

3. Superior teachers make each child a special problem for study and give the proper regard to individual differences.

4. They plan for each recitation, select appropriate subject-matter, determine the aims for presenting it, and use approved methods in all their work.

5. Superior teachers secure discipline without noise, or bluster, or scoldings, or threatenings. In a well-ordered schoolroom there is no evidence of discipline.

6. Superior teachers organize their subject-matter in terms of problems, projects, types, and comprehensive, thought-provoking questions.

7. Superior teachers use their classrooms as laboratories. Here they study in their regular work individual differences, try out different methods, experiment with mental and achievement tests, solve difficult problems, develop interesting projects, and so on.

8. Superior teachers take time to make definite and reasonable assignments with effective motivation.

9. They look beyond the mere giving of knowledge and its interpretation to the development of initiative, right attitudes, wholesome interests, and American ideals, together with correct habits of thinking.

10. Superior teachers subscribe to educational magazines.

11. Superior teachers give standardized tests early in the term, report the use of them often, and use the results as a basis for placing emphasis.

12. They often overlook minor faults, wisely stressing what is commendable.

13. They make themselves independent of textbooks.

14. Superior teachers make large use of supplementary material.

15. They provide interesting seat work.

16. They give an adequate setting for the recitation.

17. They provide for systematic reviews, distribute their questions over the whole class, and keep all the class busy.

18. They work at times with open books.

19. They require neat notebooks.

20. They make large use of correlation.

21. Superior teachers require from their pupils complete sentences and consecutive discourse.

22. They use the whole method in memorizing.

23. They make large use of blackboards, charts, outlines, and summaries.

24. They hold pupils responsible for assignments.

25. Superior teachers not only rate themselves but seek rating by others.

THINGS TO AVOID IN TEACHING

1. Avoid calling the name of the pupil before stating the question. Put the question to the whole class and then call on some particular pupil.

2. Avoid repeating the answer of the pupil.

3. Avoid the "and" habit yourself and have your pupils avoid it.

4. Avoid talking too much. Let the pupils talk.

5. Avoid questioning only a few pupils. Distribute your questions over the whole class.

6. Avoid disputing with pupils.

7. Avoid wandering from the main issue of the recitation.

8. Avoid assigning too much home work or requiring too much written work.

9. Avoid making home work too difficult.

10. Avoid indefinite assignments and assignments beyond the abilities of the pupils.

11. Avoid worrying over mistakes that cannot be remedied.

12. Avoid punishing the whole class for the offence of one or a few.

13. Avoid the use of corporal punishment.

14. Avoid asking too many small questions. Use a few well-thought-out, thought-provoking questions.

15. Avoid being late in the morning or leaving too soon in the afternoon.

16. Avoid indefiniteness in teaching.

17. Avoid questioning only bright pupils.

18. Avoid the use of sarcasm or ridicule. Courtesy and gentleness are always desirable.

19. Avoid confusing application with generalization.

20. Avoid letting all the pupils speak at once.

CRITICISM OF RECITATIONS

A very important phase of training student-teachers is the requirement of a critical analysis and evaluation of observation lessons taught by critic teachers. The following criticism was prepared by a student-teacher of the Radford State Teachers College after observing a language lesson.

ANALYSIS

Subject: Language

Grade: Fourth

Type: Drill

Teacher's Aims:

- (1) To teach the correct forms of *see*.
- (2) To supplant incorrect with correct forms of *see*.

Pupil's Aims:

- (1) To learn the correct forms of *see*.
- (2) To use the correct forms of *see* in complete sentences.

Procedure:

1. Recall of divisions of time; illustrations of these divisions, with the principal parts of *stand*.
2. The principal parts of *see* were then given and illustrated in sentences.
3. *Have, has, and had* in their relation to *see*.
4. Pupils were required to give sentences expressing present, past, and perfect time.
5. Pupils were required to give original sentences stating what they could see, what they saw coming to school, and also sentences showing the correct use of *have seen, has seen, and had seen*.
6. Drawings were made on the board illustrating the difference between *see, saw, and seen*.

EVALUATION OF THE LESSON

1. Teacher- and pupil-activities were fairly well balanced. If more pupil-activity could have been secured, better results would have followed.
2. The aims of the lesson, as stated above, were clear and definite. They were attained, however, only in part. This lesson should be followed by drills. If a group of sentences containing blanks for correct forms of *see* and other similar verbs of former lessons had been put on the board, more drill could have been had. This would have been a review also. No definite results were fixed.
3. The subject-matter was valid, but there was not enough of it.
4. The teacher's skill in presentation was fair. Her two

devices were well chosen. If she had used the drawing more largely, she would have obtained better results.

5. The teacher made no assignment.

6. Only about 75% of the pupils seemed attentive and responsive. Interest was not self-initiated, or spontaneous, but rather of a passive kind. There was no provision for initiative or social activity. Neither did the lesson reveal habits of study or preparation. Most of the responses were correct, but several of the pupils' responses showed the need of further drill. The lesson as a whole could not be rated over a B.

The following questions, formulated by one of the student-teachers, served as the basis of a very careful study of the recitation.

QUESTIONS ON TEACHER-ACTIVITY

1. Was the teacher clear in her aims?
2. Was the subject-matter valid?
3. Did the plan of the recitation reveal its purpose?
4. What devices and motives did the teacher use?
5. Did the teacher distinguish between essentials and non-essentials?
6. Was she skillful in questioning?
7. Was the discipline good?
8. How did the recitation advance the class in language?
9. Was the assignment clear and definite? Give reasons for your position.
10. Were pupil- and teacher-activity well balanced?
11. What were the permanent results of the recitation?

QUESTIONS ON PUPIL-ACTIVITY

1. What kind of attention was revealed?
2. What was the kind of interest used?
3. Did the recitation invite the offering of problems or suggestions, or give occasion for initiative?
4. Were the responses quick and accurate, or slow and inadequate?
5. Were the pupils prepared for the questions asked by the teacher?
6. How would you rate the recitation?

QUESTIONS

1. Distinguish between rating the teacher and rating the recitation. Which plan do you like better as a means of determining teaching efficiency or the worth of the teacher?
2. What do Dr. Dewey and Dr. Pittman think about present practice in adjusting pupil- and teacher-activity?
3. What are the chief advantages of the author's scheme for evaluating the recitation?
4. What are the merits and demerits of "A Scheme for Observation of Instruction"?
5. What is meant by "self-improvement by self-analysis"?
6. Observe a lesson and then evaluate it with the author's scheme for judging the recitation.
7. Observe a lesson and then write out a critical analysis of it.

REFERENCES

Dewey: *Democracy and Education*. Houghton Mifflin Co., Boston.

Pittman: *Successful Teaching in Rural Schools*, Chapter XII. American Book Co., New York.

Twelfth Yearbook, pages 62-74. Public School Publishing Co., Bloomington, Ill.

Fourteenth Yearbook. (Entirely devoted to teacher-rating.) Public School Publishing Co., Bloomington, Ill.

CHAPTER XVI

Standards for Lesson Planning

DEFINITION

A lesson plan is an outline to be followed in conducting a recitation. It is a kind of blueprint to guide the teacher. Earhart speaks of it as "the preparation made by a foresighted teacher to be used as a guide in teaching."

In general, a complete lesson plan involves the introduction, the aims, the organization of subject-matter, method of presentation, pivotal questions, illustrations, references, summary, generalization, and assignment.

VALUE

A good lesson plan gives direction to the recitation and prevents wandering. It clarifies aims and procedure and leads to definite results. Earhart says: "It directs effort so that desired results are sure to follow, and to follow with economy of time and effort. It makes it more likely that the teacher will include all that should be taught in connection with a given topic; also that procedure will follow the lines that it should and will not wander far afield." The same author says: "It is as necessary for the teacher to make this preparation as it is for the general to plan his campaign, for the engineer to plan his bridge, and for the merchant to plan for the trade of the coming season."

ELEMENTS OF GOOD LESSON PLANNING

1. *The teacher must have a thorough and recent knowledge of the subject-matter.* No one can discover the main problem, the central thought or the larger coordinate thoughts without a thorough knowledge of the subject-matter. The success of the recitation described below was due largely to the fact that the teacher and the pupils were thoroughly acquainted with the material. Neither is it safe to depend upon an old plan. Subject-matter is constantly changing; the children of this class are different from the children of the same class last year.

For this reason the subject-matter should be revised. Some of the old material must be left out; some new material must be added. There should be a new illustration, a new comparison, a new application. It is just as important for the teacher to be fresh in his knowledge as it is for the preacher to be fresh in his.

2. *The subject-matter must be well organized around some central truth or some worth-while problem.* In a certain recitation in third-grade geography, the teacher organized the material around this problem: "What is the geography of the Flanagan Farm?"

This was a very practical problem for the children of this particular school, since the school was located on the Flanagan Farm and the children were acquainted with the data involved in the solution of the problem. The teacher explained what is meant by the "geography" of any place—its location, its climate, its altitude, the nature of its soil, the principal crops, the people and their occupation. Without any preparation whatever the pupils made some valuable contributions to the development of the lesson plan. The

idea of tying up geography with the everyday experiences of the children in this way was excellent.

It was interesting to hear them place the farm with reference to near-by towns. The recitation proved so satisfactory that the teacher made the problem the basis of a series of lessons and developed the following outline as a guide to the recitations:

OUTLINE OF RECITATION

Problem: What is the geography of the Flanagan Farm?

I. Introduction:

1. What is meant by the geography of any place?

II. Where is the farm located with reference to near-by towns?

III. What are the physical features of the farm?

1. Its surface.

2. Its soil.

3. Its climate.

4. Its seasons.

IV. Who are the people that live on this large farm?

1. The owner, now a resident of a city.

2. The employees—tenants.

V. What are the principal crops of this farm?

1. The corn crop.

2. The wheat crop.

3. Cattle, sheep, and hogs.

VI. Summary: The geography of the Flanagan Farm includes its location, its physical features, a description of its people, and the principal crops.

One can readily see how real a series of geography lessons of this type would be to children of the third or fourth grade with first-hand knowledge of the material involved and with an outline such as was worked out in this particular case.

3. *The third element of a good lesson plan consists of a series of good questions.* In fact, one of the best

outlines for any recitation is five or ten well-thought-out, comprehensive, thought-provoking questions calling for a large use of the subject-matter involved and showing main and subordinate ideas. Here are some of the questions used by the teacher in conducting the lessons described above:

1. What do we mean by the geography of any place? What is the geography, for instance, of this particular school? Some of you live on the Flanagan Farm. What do we mean by the geography of the Flanagan Farm?

2. Where is the Flanagan Farm with reference to nearby counties and towns?

3. Who can describe the seasons of the Flanagan Farm and of this section of the state?

4. Why do the tenants of the Flanagan Farm raise wheat and corn as the principal crops?

5. Why do they raise so many cattle, sheep, and hogs?

6. Why did the owner leave his beautiful country home and move to the city?

7. Why are so many farmers leaving their farms to live in the city?

8. Do you think it well for farmers to leave their country homes to live in the city? Why?

9. How can we stop people from leaving the country to go to the cities?

10. Can you tell me now what we mean by the geography of any place?

4. *A lesson plan to be effective must have a clear objective running through the entire outline or organization of the material.* This objective should be revealed by the organization just as the purpose of the house is revealed by the blueprint. One can easily see that the big objective of the above recitation is to make geography real to the children. This idea is revealed in the problem, in the outline, and in every step of the recitation.

Take another illustration—the lesson plan for “The Angelus” in Chapter IV of this book. The first step in planning this lesson was the decision as to the outcome, the particular kind of response desired on the part of the pupil. This decision was the controlling factor of all other decisions. Written compositions that might serve as standards of possible achievement were desired. For this reason, an English teacher was chosen rather than an art teacher. The teacher and the writer together selected “The Angelus” because they thought that this was the best picture available to serve as a basis for the pupils’ compositions.

The teacher placed emphasis on the story revealed by the picture because she wanted this story to serve as material for the compositions. This lesson plan shows well how the objective of the lesson should be the controlling factor in all planning, in the selection of material, in organization of material, and in method.

5. *The lesson plan should provide for summaries, illustrative material, references to maps, charts and books.* This is one of the most important steps in any recitation. It prevents waste in overcoming difficulties, develops interest in the task, leads to clearer and better thinking.

As a kind of standard for lesson planning I am giving the following form:

LESSON PLAN FORM

RECITATION

Subject	Grade or class
Topic	Date 192..
Lesson Type	Teacher

I. Assignment (made during the last recitation).

1. In text.
2. Out of text.
3. Problem, project, task, etc.
4. Motivation.

II. Aim.

1. Teacher's.
2. Pupil's.

III. Introduction.

1. Recall of associated material.
2. Provide adequate setting.

IV. Subject-Matter.

V. Method.

VI. Conclusion, generalization, summary.

By consent of Houghton Mifflin Company, we are giving also the general form for lesson plans found in Earhart's *Types of Teaching*, page 237.

SUGGESTIONS FOR LESSON PLANS

- I. The topic.
- II. The teacher's aim. (A specific statement of the responses of knowledge, attitude, feeling, action, conduct, or skill which the teacher intends to secure.)
- III. Brief analysis of the topic, showing the principal things which must be known or done in order that the teacher's aims may be accomplished. Only the most important points should be given, and these should be arranged in logical order when such an order exists.
- IV. Procedure and the psychological arrangement of the subject-matter to be taught.

SUBJECT-MATTER

PROCEDURE

1

1

Former ideas and activities which serve as an intro-

Questions, conversation or review of former activities

SUBJECT-MATTER (Cont.)

duction to the new topic.

2

Organization of the knowledge or experiences which constitute the subject-matter of the new topic. The material should be arranged in detail in topical form and in the order in which it will probably be taken up, i. e., in psychological order rather than logical order. The books to be used should be named and the pages given.

3

Statement of the results which the teacher expects in the class as a consequence of the treatment of the new topic. (See under "The teacher's aim," above.)

PROCEDURE (Cont.)

to help the pupils recall or reorganize previous ideas or experiences which are necessary as a basis for the new knowledge and which pave the way for its introduction. This preliminary exercise should lead the class to desire the new work and to appreciate its value, and out of it should come the aim as stated by the pupils.

2

The teacher's procedure in causing the class to gain or organize the new knowledge or experience the new activity. It should include the pivotal questions which introduce the main topics as indicated under "Subject-Matter 2." It should show what illustrations, illustrative materials and motor activities the teacher will employ. It should indicate, also, the place and nature of the summaries, reviews, drills and assignments which occur during the development of the topic.

3

Means by which the teacher proposes to test the accomplishment of the aim. Questions may be asked or topics assigned which involve the use of the new knowledge in some other re-

PROCEDURE (Cont.)

lation than the one employed in class. The use of the ideas may be shown in the execution of some constructive work or in some social activity.

QUESTIONS

1. What are the elements of a good lesson plan?
2. What is the difference between organization of subject-matter and lesson plans?
3. What are the values of lesson plans?
4. Why can't we use old lesson plans in teaching without going to the trouble of devising new ones?
5. Select some topic in geography, find a problem in connection with it, and work out an appropriate lesson plan.
6. Do the same with a topic in history.
7. Select some topic in English and then work out a detailed lesson plan.
8. What would you do first in planning a lesson on habit-formation?
9. How would you plan a lesson of the appreciative type? What are the important principles involved in such a lesson?
10. Is plan-making worth the effort it requires? Why?

REFERENCES

Strayer: *Brief Course in the Teaching Process*, Chapter XVI. Macmillan Co., New York.

Earhart: *Types of Teaching*, Chapter XV. Houghton Mifflin Co., Boston.

Burton: *Supervision and the Improvement of Teaching*, Chapter XVIII. D. Appleton & Co., New York.

McMurry: *The Method of the Recitation*, Chapter XIV. Macmillan Co., New York.

Charters: *Methods of Teaching*, Chapter XXV. Row, Peterson & Co., Chicago.

CHAPTER XVII

Illustrations of Lesson Plans

The following lesson plans will illustrate the principles involved in this important phase of teaching. They are the work of various teachers and each plan has been tried out and found practical.

LESSON PLAN NO. I

A Model Lesson for Teaching Good Citizenship

(Accepted for the Virginia State Course of Study)

EXPLANATION:

The main objective of our public schools is good citizenship. For no other reason is the state justified in collecting large sums of money from the people to spend on our schools. This policy is the safest and surest way the state has to protect itself from the evils of vice, ignorance, and superstition. For this reason the state has gone into the business of making our boys and girls into desirable and efficient citizens with democratic ideals, attitudes, habits, and interests. The following lesson on "Kindness" will serve us as a model for the teaching of the virtues of democracy.

Topic: "Kindness."

1. Teacher's aim:

To discuss with the group the ways in which members can be kind to playmates and to build up in them attitudes of kindness and politeness.

2. Pupil's aim:

To learn when and how to be polite and kind.

3. *Introduction:*

This morning as I walked through the hall I noticed how kind and polite John was to Mary. They were at the drinking fountain at the same time. John let Mary drink first and held the handle firmly and with a steady hand while Mary drank. And the best part of it all was that Mary turned and said "Thank you, John," in the kindest manner. They both seemed so happy. So this morning I thought we might talk together about being kind and polite to our playmates and friends.

SUBJECT-MATTER

Kindness and politeness to playmates and friends.

PROCEDURE

The following questions are suggestive:

In the Schoolroom

Say "Good morning" to the teacher and comrades. (Use name of person addressed.) Say "Excuse me," "Pardon me," "Thank you," "If you please."

Do not talk when others are talking.

Go behind instead of in front of others.

Take your turn, do not crowd or push.

Speak so that people can hear you.

Walk lightly when the group is working (not on tiptoe).

Walk lightly in the schoolroom and halls so as not to disturb others.

Do not let the door slam.

When a thing is handed you, take it politely; be careful not to jerk it.

Help your neighbor if he needs it.

What can we do in the schoolhouse to make it a happy place in which to work?

What do you think, John?

What have you to suggest, Mary?

Have you a suggestion, Helen?

How can pupils show kindness to one another?

How can pupils show kindness to the teacher?

SUBJECT-MATTER (Continued)

PROCEDURE (Cont.)

On the Playground

Speak kindly, with gentle voices.
 Give others a chance to play.
 Be careful not to hurt anyone.
 Never call children naughty names.
 See that others have a good time.

What can pupils do to show kindness on the playground?

On the Street

Speak to others cheerfully; emphasize "Good morning," "Good afternoon," "How do you do?"

What are some things pupils can do to show kindness on the street?

Discourage "Hello" as a salutation to adults.

Boys should lift or touch their caps.

Make way for others to pass.

Do not expect others to get off the walk.

Be careful when you have your wagon or skates.

Do not call loudly to others—go up to them in order to speak.

Keep to the right when you meet people, to the left when passing them.

What are some things pupils can do to show kindness in the cuhrch? At home?

4. *Conclusion:*

a. Generalization or summary.

(1) Name three places where we all have the opportunity to be polite and kind.

(2) Name quickly three ways in which you are going to be kind and polite.

b. Application.

Let us all see in how many ways we can be polite to our schoolmates in the school, on the playground, and on the street (on the way to and from school).

c. Assignment:

Notice all the kind things you see your playmates do to-day and be ready to tell us about them the next time we talk about kindness and politeness.

5. *Suggestions:*

- a. Make a chart listing names of children; use stars to designate children who have been noticeably kind and polite during the week. Let the group be the judge.
- b. Story-telling and discussion bringing out kindness.

LESSON PLAN NO. II

(Accepted for the Virginia State Course of Study)

Subject: Oral and Silent Reading.

Selection: "The Barefoot Boy," by John Greenleaf Whittier.

Type: Appreciation.

Correlation: Reading, literature, biography, oral and written compositions.

Teacher's Aim:

(1) To get the pupil to see in this poem the poet as well as the barefoot boy.

(2) To see that it was his knowledge gained by early experience, his sympathy with boyhood, and his wish that all boys might appreciate their opportunities for the finest of pleasures that made Whittier able to give us this picture of the barefoot boy and to write so understandingly and tenderly.

(3) To enjoy the poem and to read it well.

Pupil's Aim:

(1) To find out all the things that a barefoot boy knows that are not "learned at schools"; why the boy is a prince and the "grown-up man only is republican."

(2) To understand and appreciate the poem.

Problem: What kind of life shall we provide the boy?

Introduction or setting:

Whittier is the poet of country life. He shows us the joy of living out of doors and of growing up naturally. He was once a barefoot boy himself on a farm near Haverhill, Massachusetts.

He writes this poem to a barefoot boy whom he sees whistling along the road. As he looks at the boy he thinks of his own boyhood. He remembers that in the fields and woods he used to find out more things about wild creatures than he ever learned at school. He knew the bees and how they stored their honey; the flowers and where they grew; the different kinds of birds; knew where to find the finest berries, earliest nuts and apples, and all about what was in the pond.

At supper time he had his bowl of bread and milk on the doorstep, saw the sky all purple and gold in the sunset, and heard the frogs croaking down in the pond in different tones like a band of music. A little later when it began to grow dark he saw the fireflies come out.

He says that the barefoot boy is a prince, because the boy has everything in nature to enjoy and freedom to enjoy it; he has more than the millionaire can buy, something which is better than money. We are going to find out why the boy is better off than a millionaire.

So the poet tells the barefoot boy to laugh and be happy while he may; for when he grows older he will be too proud to go barefooted. He will put his feet into shoes (here called "prison cells"), and will lose his freedom, and have to toil for a living, just as the colt is shod when he becomes a horse and is put to work.

Pupil's Preparation:

Use helps to study.

Read about Whittier's life.

In what was he like the barefoot boy?

What things belonging to the barefoot boy do you know?

What things have you learned in wood and field that the poet has not mentioned?

SUBJECT-MATTER OF THE POEM

First Stanza

Blessings on thee, little man,
Barefoot boy, with cheek of tan!
With thy turned-up pantaloons,
And thy merry whistled tunes;

SUBJECT-MATTER (Continued)

With thy red lip, redder still
 Kissed by strawberries on the hill;
 With the sunshine on thy face,
 Through thy torn brim's jaunty grace:
 From my heart I give thee joy,—

- 10 I was once a barefoot boy!
 Prince thou art,—the grown-up man
 Only is republican.
 Let the million-dollared ride!
 Barefoot, trudging at his side,
 Thou hast more than he can buy
 In the reach of ear and eye,—
 Outward sunshine, inward joy;
 Blessings on thee, barefoot boy!

PROCEDURE

Read the first ten lines describing the barefoot boy. Why is line 10 a sad statement? Why is a boy a "prince" and a man a "republican"? Who are the "million-dollared"? Why is the barefoot boy the richer of the two? Read aloud the first stanza describing the barefoot boy and what he is.

Second Stanza

- O for boyhood's painless play,
 20 Sleep that wakes in laughing day,
 Health that mocks the doctor's rules,
 Knowledge never learned of schools,

In lines 19-22 what does Whittier long for again? Explain the meaning of "boyhood's painless play," "sleep that wakes in laughing day," "health that mocks the doctor's rules."

Of the wild bee's morning chase,
 Of the wild-flower's time and place,
 Flight of fowl and habitude
 Of the tenants of the wood;
 How the tortoise bears his shell,
 How the woodchuck digs his cell,

SUBJECT-MATTER AND PROCEDURE (Continued)

- And the ground-mole sinks his well;
30 How the robin feeds her young,
How the oriole's nest is hung;
Where the whitest lilies blow,
Where the freshest berries grow,
Where the groundnut trails its vine,
Where the wood-grape's clusters shine;
Of the black wasp's cunning way,
Mason of his walls of clay,
And the architectural plans
Of gray hornet artisans!—
40 For, eschewing books and tasks,
Nature answers all he asks;
Hand in hand with her he walks,
Face to face with her he talks,
Part and parcel of her joy,—
Blessings on the barefoot boy!

Read lines 23-40 and tell the wonderful things that a barefoot boy knows that he never learned from books. Who taught him these things? What has nature taught you? Explain the meaning of "for eschewing books and tasks"; "nature answers all he asks." What is meant by "part and parcel of her joy"?

Third Stanza

O for boyhood's time of June,
Crowding years in one brief moon,
When all things I heard or saw,
Me, their master, waited for.

What is expressed in line 46? Why is June boyhood's time? Explain "crowding years in one brief moon." Why does he mention this particular month? How was he "master of all" the wonderful things of June? How did they wait for him?

- 50 I was rich in flowers and trees,
Humming-birds and honey-bees;
For my sport the squirrel played,

SUBJECT-MATTER AND PROCEDURE (Continued)

- Plied the snouted mole his spade;
 For my taste the blackberry cone
 Purpled over hedge and stone;
 Laughed the brook for my delight
 Through the day and through the night,
 Whispering at the garden wall,
 Talked with me from fall to fall;
 60 Mine the sand-rimmed pickerel pond,
 Mine the walnut slopes beyond,
 Mine, on bending orchard trees,
 Apples of Hesperides!
 Still as my horizon grew,
 Larger grew my riches too;
 All the world I saw or knew
 Seemed a complex Chinese toy,
 Fashioned for a barefoot boy!

Read lines 50-68 and tell in what was Whittier rich when a boy. How do men lose these riches? (Hard work leaves them no time to enjoy the birds, the trees, and the flowers. They are too anxious to make money to give time to these things.) Why did the world seem like a "complex Chinese toy" to him?

Fourth Stanza

- O for festal dainties spread,
 70 Like my bowl of milk and bread,—
 Pewter spoon and bowl of wood,
 On the door-stone, gray and rude!
 O'er me, like a regal tent,
 Cloudy-ribbed, the sunset bent,
 Purple-curtained, fringed with gold,
 Looped in many a wind-swung fold;
 While for music came the play
 Of the pied frogs' orchestra;
 And, to light the noisy choir,
 80 Lit the fly his lamp of fire.
 I was monarch: pomp and joy
 Waited on the barefoot boy!

SUBJECT-MATTER AND PROCEDURE (Continued)

Describe a banquet hall made by man.
Describe the barefoot boy's banquet hall by reading aloud lines 69-76. Explain each line. What was his orchestra? What furnished the lights of the orchestra and the banquet hall? What does "I was monarch" mean? What things waited on him?

Fifth Stanza

- Cheerily, then, my little man,
Live and laugh, as boyhood can!
Though the flinty slopes be hard,
Stubble-speared the new-mown sward,
Every morn shall lead thee through
Fresh baptisms of the dew;
Every evening from thy feet
90 Shall the cool wind kiss the heat:
All too soon these feet must hide
In the prison cells of pride,
Lose the freedom of the sod,
Like a colt's for work be shod,
Made to tread the mills of toil,
Up and down in ceaseless moil;
Happy if their track be found
Never on forbidden ground,
Happy if they sink not in
100 Quick and treacherous sands of sin,
Ah! that thou couldst know thy joy,
Ere it passes, barefoot boy!

What warning does he give to boys in the first two lines of the last stanza? Explain "flinty slopes," "stubble-speared," "fresh baptisms of the dew." What are "prison cells of pride"? Why does he call them this? Explain "forbidden ground," "quick and treacherous sands of sin." Why is sin like quicksand? What will soon come to the bare feet of the boy? What does the poet hope will never happen to the bare feet? What do the last two lines of the poem tell you?

ASSIGNMENTS FOR FUTURE LESSONS

Write the best poem you can on the joys of the barefoot boy of to-day.

Express the substance of the poem in a prose composition.

Discuss in a five-minute talk the experiences that should belong to every boy.

LESSON PLAN NO. III

(Accepted for the Virginia State Course of Study)

Type: First Grade Language Lesson.

Topic: Stevenson's "The Swing."

Teacher's Aim:

To get the pupils to memorize the poem and appreciate its rhythm and beauty.

Pupil's Aim:

To memorize the poem and to enjoy again former experiences with swings.

Introduction:

How many of you have a swing? Where is your swing? Did you swing very high? Did you ever "let the old cat die"? What are some of the things you saw when you swung high? I know a story which tells how much a little boy liked to swing and some of the things he saw while swinging. Listen while I tell you.

SUBJECT-MATTER

How do you like to go up in
a swing,
Up in the air so blue?
Oh, I do think it the pleas-
antest thing
Ever a child can do!

PROCEDURE

Reading or reciting the poem. The teacher tells or reads the poem to the children in a natural way, being careful to bring out the meaning. Read it a second time, asking the children to listen carefully to the things which the boy saw. Repeat the first stanza. How does the boy feel about swinging? Which words tell?

SUBJECT-MATTER (Cont.)

Up in the air and over the
wall,

Till I can see so wide,
Rivers and trees and cattle
and all

Over the countryside—

Till I look down on the gar-
den green,

Down on the roof so
brown—

Up in the air I go flying
again,

Up in the air and down!

PROCEDURE (Cont.)

Repeat the second stanza.
What are the things he saw?

Be sure to bring out the idea
of rivers, trees, cattle, all
over the countryside.

Repeat the third stanza.
What are some of the other
things he saw?

During the discussion and
analysis of each stanza the
children will have learned
some words so that memoriz-
ing the poem will not be diffi-
cult. Ask the children if they
would like to say it. Repeat
it together. Individual chil-
dren may say it with the as-
sistance of the teacher, al-
ways using the correct
phrases. The poem has been
set to music which can be
learned later.

During the first year children
should memorize a minimum
of three short poems such as
"The Swing."

LESSON PLAN NO. IV

(Accepted for the Virginia State Course of Study)

Grade: Seventh.

Subject: Silent Reading.

Topic: Lincoln's Address at Gettysburg.

Type: Interpretation.

Teacher's Aim:

1. To develop appreciation for this masterpiece.
2. To teach good citizenship and patriotism.
3. To help pupils understand and appreciate the address.

Pupil's Aim:

1. To read the world's greatest short speech.
2. To memorize and deliver the address to the class.

Previous Preparation:

The week before this recitation, the pupils should study the life of Lincoln. The day before, the Battle of Gettysburg should be studied. The causes of the war between the states should also be reviewed.

Introduction:

What great battle did we discuss yesterday? Some time after this battle the state of Pennsylvania purchased this battlefield for a burying ground for the soldiers. It was made into a National Cemetery. (Locate Gettysburg on the map and discuss it as it is to-day.) On November 19, 1863, the dedication services were held. (Have you ever seen a dedication service? Tell us about it.) At the dedication of this National Cemetery, a great crowd was present. A noted orator named Everett had been invited to speak. President Lincoln and his cabinet were there. It was a great occasion. After Mr. Everett's speech, the President arose and quietly delivered a short address that is now recognized as the world's greatest short speech.

SUBJECT-MATTER

Fourscore and seven years ago our fathers brought forth on this continent a new nation, conceived in liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field as a final resting-place for those who here

PROCEDURE

Think for a moment of the causes of the war between the states. Now think of the great battle of Gettysburg as a part of this war. Think of the dedication ceremony, of the great crowd, of the speech two and a half hours long, of the tall, sad man who spoke for but a few minutes. In this short time he said many wonderful things. Read the address silently once, and then see how much of it you can re-

SUBJECT-MATTER (Cont.)

gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we cannot dedicate—we cannot consecrate—we cannot hallow—this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember, what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain—that this nation, under God, shall have a new birth of freedom—and that government of the people, by the people, for the people, shall not perish from the earth.

Generalization:

The value of a speech does not depend upon the number of words it contains, but upon the sentiment it expresses.

PROCEDURE (Cont.)

peat. (Pupils read the address silently.)

Every sentence is a beautiful thought. Read it again to see how many points you remember by making a list. Explain the meaning of each point. What is meant by "government of the people, by the people, for the people"? (Free discussion bringing out individual responsibility to the government.)

Next Day

During the English period have a composition written on

this subject: *How can we help to improve our government?*

During the reading period the teacher should read the Gettysburg Address aloud. The most intelligent persons of to-day know this address. Do you think it is worth knowing? Why? Would you like to memorize it? The one who learns it best in the shortest length of time may say it before the general assembly to-morrow.

LESSON PLAN NO. V

(Accepted for the Virginia State Course of Study)

Grade: Second.

Aim:

To teach the children how to pronounce and spell words correctly.

SUBJECT-MATTER	METHOD
Words written on the board	I will pronounce the first word. Helen, take the pointer. Put it under the word; pronounce the word. John, pronounce it. (Teacher writes the next word)
hand	Look carefully at the second word as I pronounce it. What is the sound of the first letter? Pronounce the word. What part of it is the same as the first word? I shall write that part here.
land	
and	Pronounce the first word, Jane. Pronounce the second word, Henry. What is the first letter of <i>hand</i> ? What is the first letter of <i>land</i> ?
This is my right hand.	Close your eyes. (Teacher erases <i>hand</i> .) Open your eyes. Which word have I erased? With what letter did it begin? What word is left on the board? Mary, erase the first letter of this word. What was the letter Mary erased? What is the sound of "l"? Write <i>hand</i> on the board, John. Spell as John writes. Mary, write <i>land</i> on the board. Spell as Mary writes. Who would like to write <i>hand</i> ? Who would like to write <i>land</i> ?
Show me your right hand.	

METHOD (Continued)

(Teacher writes sentences on board.) Who can find *hand* in this sentence?

Read the sentence.

What does the next sentence tell you to do?

Do it. Read the sentences.

Who can tell me something about land? Who will write a sentence for to-morrow with *land* in it?

Next day each word is reviewed and written from dictation. The sentences which the children brought to class are read. Some are written on the board.

LESSON PLAN NO. VI

(By Miss M. E. Coppedge. Accepted for the Virginia State Course of Study)

Subject: Oral Reading.

Grade: Seventh.

Type: Appreciation.

Topic: "The Song of the Chattahoochee," by Sidney Lanier.

Aims:

- (1) To have the pupils see how nature appeals to a poet and how he interprets what he sees.
- (2) To catch the spirit of the poet and to read the poem in the light of this spirit.

Introduction:

- (1) Have you read Tennyson's poem "The Brook"?
- (2) What means does the poet use to make one hear the brook?
- (3) Listen to this poem, called "The Song of the Chattahoochee," while I read. (Teacher reads entire poem.)

SUBJECT-
MATTER

METHOD

First
Stanza

Find the Chattahoochee River on your map, with its source in the "hills of Habersham" and its course through the "valleys of Hall." (Habersham and Hall counties in northern Georgia.)

SUBJECT-
MATTER
(Cont.)

METHOD (Continued)

Second Stanza	Name in the poet's words all obstacles that are overcome. What is peculiar in the phrases "wilful water-weeds," "laving laurel," "turned my tide"? Find other examples in the poem of alliteration and tell what is added to the poem by this means. Explain "held me thrall," "laving laurel," "fondling grass," "for to work delay." (In old English it was customary to use "for to" where now we use only "to.") Find another example of this in the poem. In this stanza the smaller plants, each in its own way, try to hold back the stream. What are they?
Third Stanza	Here the different trees urge the stream to stay, each offering a different charm. Name and tell what each had to offer. What "veiled the valleys" in line 2 of the third stanza? Explain "wrought me her shadowy self to hold," "flickering meaning," "pass not, so cold."
Fourth Stanza	The stones with their beauty try to hold the stream. Describe white quartz, ruby, garnet, amethyst. "Bar me of passage" is an old English phrase for "bar my passage." What is a "friendly brawl," "luminous jewel"? Put into simpler words "made lures with the lights of streaming stone."
Fifth Stanza	This stanza gives us all the reasons for the stream's hurry. Note that it is not honor or glory that calls. What is its "duty"? Explain "to be mixed with the main." Name all the things the stream is pressing forward to do. This stream is symbolic of life; affection, comfort, ease, wealth all try to hold us back so that the goal may not be reached.

Summary:

Name all the different things that tried to stop the brook. What was the brook pressing forward to do?

Think of yourself as having a duty to do and mention some things that might try to call you from it.

What things try to hold people back from pressing forward to their goals?

LESSON PLAN NO. VII

(By Professor Joseph E. Avent)

A. Assignment:

1. For the next time we have eight words, page 102. Really only four, as four of the words are spelled much like the other four. What differences do you observe?
2. Lesson 55, Fourth Grade Part, *New World Speller*.
3. Note the change in spelling *full* when it is made a syllable in another word. How many l's in it? In *pity* what change is made in "y" before adding "ful"?
4. We want to know four things about these words:
 - a. How to pronounce each word by syllables and as a whole.
 - b. How to spell orally each word by syllables and as a whole.
 - c. How to write each word as a whole.
 - d. How to use each word in a sentence.I will show you how to pronounce each word. I will pronounce each word for you, and then you pronounce it after me. This way, *pity* (i) pit'y; and so for the other words (for both ear and vocal training).

B. Aims:

1. Teacher's Aims:
 - a. Aim of the course: to teach the children how to spell and to use correctly all the words in our text, pp. 93-122.
 - b. Aim of the lesson: to teach the children how to spell and to use correctly eight words assigned.
2. Pupil's specific aim, to learn
 - a. How to pronounce correctly all eight words.
 - b. How to spell orally and to write these words.
 - c. How to use them in sentences.

C. Results Expected: That all the children will be able—

1. To pronounce the words by syllables and as a whole. (Voice.)
2. To spell orally each word by syllables and as a whole. (Voice-training.)

3. To write correctly each word as a whole. (Motor training.)

4. To use each word in a sentence. (Meaning.)

D. Methods and Devices by Which to Accomplish These Results:

1. Hold up as the ideal for good work to make 100 per cent in spelling.
2. With their books open have the children pronounce each word by syllables and as a whole, individually, and collectively (for vocal training).
3. Pronounce the words for the children individually to spell by syllables and as a whole.
4. Pronounce the words to the children to write as a whole (for ear training and expression).
5. Ask the children to put their words on one side of the desk, easy to see. Ask them then to write sentences on the first four (or any other four) words. While they are doing this, slip down the aisles and quickly check up their written spelling. To those who spell all words right, give 100 per cent (for training in language expression).
6. Take up the papers containing sentences written.
7. In assigning the next lesson pronounce each word and have the children pronounce by syllables and as a whole.

E. Recitation.

1. Introduction:

- a. Refer to the need for correct spelling, both for high standing and for its usefulness. Stress the ideal of 100 per cent in spelling.

2. Subject-matter.

- | | | | |
|----------|----------|---------|------------|
| 1. pit'y | pit'iful | delight | delightful |
| will | wilful | fruit | fruitful |

2. Other words recently missed.

3. Methods.

- a. Have the children, with books open, pronounce each word by syllables and as a whole, by one individual for a word and then by all for the same words.
- b. Their books being closed, give out the words, and let one child spell a word by syllables and as a

- whole; then let the class repeat the same spelling.
- c. With their writing pads and pencils ready, let them write the words as wholes, as the teacher dictates them.
 - d. Put on the board four or more of the words. Have the children make good, complete sentences of them. They should leave their words exposed so that, as they write their sentences, the teacher can pass rapidly down the aisles and check up their written spelling.
- 1) The spelling has been rehearsed four times in the recitation; no further rehearsal is needed.
 - 2) These same words should be rehearsed three or four days in succession, and then all should be reviewed for a spelling match on Friday every week or two.

LESSON PLAN NO. VIII

(By Mrs. Marianna McGee. Accepted in part for the Virginia State Course of Study)

Selection: Lowell's "The Vision of Sir Launfal."

Grade: Sixth or Seventh.

I. Introduction:

We are going to divide "The Vision of Sir Launfal" into four silent reading lessons as follows:

1. Prelude to Part First.
2. Part First.
3. Prelude to Part Second.
4. Part Second.

II. Preparation of pupils (for the four parts):

1. Read Prelude to Part First and list any word that you do not know the meaning of. Look up the meaning in the dictionary. Bring this list to class.
2. Re-read, and be prepared to answer the following questions:
 - a. Read one stanza and think how a musician begins to compose a wonderful piece of music, and then think how a poet begins to write a poem.
 - b. What does the first stanza mean to you?

- c. Read the second stanza and describe the influence of nature around us.
- d. What is the central thought of the first half of the third stanza?
- e. Memorize the portion of the third stanza that starts "for a cap and bells," etc.
- f. What does this portion of the stanza mean to you?
- g. Read the fourth stanza and describe the June day that the poet pictures.
- h. Think of the time of the year that you like best.
- i. Be ready to describe a day of the season that you like best.
- j. Which sings the best song, the father bird or the mother bird?
- k. Read the fifth stanza and describe how we feel on a day in June.
- l. What message does the breeze whisper in our ear?
- m. If the breeze did not bring the news, what other messengers would bring it?
- n. Describe how the summer time makes one good.
- o. Why do you think Sir Launfal now remembers the keeping of his vow?
- p. Pick out the part of the Prelude that you would like best and be prepared to tell why, also be ready to read it to the class.

Part First

- I. Preparation:
 1. Same as in the Prelude.
 2. Can anyone tell me what is meant by the Holy Grail?
(If pupils cannot explain, the teacher must do so.)
- II. Re-read and be prepared to answer the following questions:
 1. Read stanza one and tell what order Sir Launfal gave.
 2. Why did he give this order?
 3. What did he desire to have come to him while he slept?
 4. Did it come?
 5. Read stanza two and give an oral description of the picture described there.

6. Why did the castle stand like an outpost of winter?
7. Why couldn't the summer enter it?
8. Read stanza three and describe the departure of Sir Launfal.
9. Describe the morning of his departure as given in stanza four.
10. Read stanza five and tell whom Sir Launfal saw by the gate.
11. How did Sir Launfal feel and what did he do?
12. Read stanza six and tell how the leper received the gift and what he said.
13. Pick out the part of Part First that you like best and tell why; also be ready to read it to the class.

Prelude to Part Second

- I. Preparation:
Same as heretofore.
- II. Re-read and be prepared to answer the following questions:
 1. Read stanza one and describe the season of winter in which the castle now dwells.
 2. Read stanza two and describe the Christmas decorations and good cheer within the castle.
 3. Who sees this picture within the castle?
 4. Read stanza three and describe how Sir Launfal looked without.
 5. What did the watchman do?
 6. What picture did Sir Launfal see all night?
 7. Pick out the part of Prelude to Part Second that you like best and tell why; also be ready to read to class.

Part Second

- I. Preparation:
Same as heretofore.
- II. Re-read and be prepared to answer the following questions:
 1. Read stanza one and describe the next morning.
 2. Why did Sir Launfal leave his castle gate?
 3. Compare how Sir Launfal looked upon his departure with how he looked upon his return.

4. How had he spent his life?
5. Read stanza three and tell how Sir Launfal sought for a shelter.
6. What picture does he see?
7. Read stanza four and tell who speaks to Sir Launfal and what he says.
8. Describe the leper.
9. Read stanza five and tell how Sir Launfal replied to him.
10. Read stanza six and tell what memory returns to the leper.
11. Why do you think the poet said that "The heart in him was ashes and dust"?
12. Is your heart made of this material?
13. Describe what Sir Launfal did for the leper.
14. Read stanza seven and tell how the leper became transformed.
15. Read stanza eight and tell what the leper said to Sir Launfal.
16. How did it make him feel?
17. Read stanza nine and tell what Sir Launfal says when he awakens from his swoon.
18. Read stanza ten and describe the castle now.
19. How did summer enter the castle?

III. Conclusion:

1. The poem as a whole:
 - a. Why does the Prelude to Part First describe the summer season and the Prelude to Part Second describe the winter season?
 - b. When Sir Launfal was young what season did he have in his heart?
 - c. When he was old what season did he have in his heart?
 - d. Would you like to have a vision that would picture the future to you?
 - e. Does Sir Launfal's vision give you any suggestion as to your future life or future conduct?

IV. Remarks:

1. If pupils are unable from the standpoint of comprehension to answer correctly the foregoing questions

the teacher should have the class re-read silently the portion of the poem that gives the answers.

V. Summary:

1. Write a poem of winter or of summer.

LESSON PLAN NO. IX

(From the Virginia State Course of Study)

Grade: Third.

Oral Reading:

Oral reading should lead to natural expression. By the end of the third year the children should have mastered the technique of reading.

Suggested Lesson for Appreciation:

A poem to be given as an appreciation lesson.

“A BOY’S SONG” (by James Hogg)

Teacher’s Aim:

To picture two boys having a good time out of doors.

SUBJECT-MATTER

Where the pools are bright and deep,
Where the gray trout lies asleep,
Up the river and o’er the lea,
That’s the way for Billy and me.

Where the blackbird sings the latest,
Where the hawthorne blooms the sweetest,
Where the nestlings chirp and flee,
That’s the way for Billy and me.

Where the mowers mow the cleanest,
Where the hay lies thick and greenest,
There to trace the homeward bee,
That’s the way for Billy and me.

PROCEDURE

This poem tells about some out-of-door places where two boys like very much to go. One boy is doing the talking and he

SUBJECT-MATTER AND PROCEDURE (Continued)

tells the places he and Billy like best. While I read the first part, think of a place near here that is like the one he is talking about. (After reading, show pictures of gray trout and lea.)

This is where the boys like to go when they get off into the edge of the woods. After reading, ask how many have been through the woods and have seen hawthorne? (If any have not, someone describes the flower.)

Where the hazel bank is steepest,
Where the shadow falls the deepest,
Where the clustering nuts fall free,
That's the way for Billy and me.

Now the boys tell some places they like on summer days.

What time of the year would you like to go to the place? (After reading, ask how many have seen a hazel bank. Have someone tell about the hazel bank he has seen.)

Why the boys should drive away
Little sweet maidens from their play,
Or love to banter and fight so well,
That's the thing I never could tell.

But this I know, I love to play,
Through the meadow, among the hay;
Up the water and o'er the lea,
That's the way for Billy and me.

In the last part of the poem, we find out again just where these two boys like to play.

Children are asked to tell which of all the places the boy told about they would like best and why.

Teacher reads the poem a second time without comment. She reads the poem so that the rhythm is evident, not in a singsong way, but fitting the word and thoughts to the rhythm as you would to music.

LESSON PLAN NO. X

(By Professor W. R. Bowers)

- I. Topic: Multiplication.
- II. Basis or preparation for the lesson: Ability to give the combinations in addition and subtraction and the multiplication facts of the second and third tables.
- III. Subject-matter and material.
 1. Introduction to the table of 4's.
 2. Fruits at a fruit store and toy money.
- IV. Procedure:
 1. Teacher: How would you like to play buying fruit to-day?
Pupils: We would like very much to play buying fruit.
 2. Teacher: What kind of store shall we visit?
Pupils: We shall visit a grocery or fruit store.
 3. Teacher: Most of the fruits we want to buy to-day are priced at 4 cents. What must we know?
Pupils: We must know the table of 4's.
 4. Teacher: Charles, what would you like to buy?
Pupil: I'd like to buy two apples.
 5. Teacher: How much will you have to pay?
Pupil: I shall have to pay 4 cents plus 4 cents or 8 cents.
 6. Teacher: How many times do you pay 4 cents?
Pupil: I pay 4 cents two times.
 7. Teacher: Can you write that on the board?
Pupil: Two times 4 cents are 8 cents.
 8. Teacher: Who can write it a shorter way?
Pupil: I believe I can. (Mary writes 2×4 cents = 8 cents.)
 9. Teacher: Who wants to buy 3 apples or pears at 4 cents each? I see you all like pears. Susan, you may come. How much will you have to pay for pears?
Pupil: I shall have to pay 4 cents plus 4 cents plus 4 cents, or 12 cents.
 10. Teacher: How many times do you pay 4 cents?

Pupil: I pay 4 cents three times.

11. Teacher: Can you tell me the short way to write this on the board?

Pupil: I have to take 4 cents three times.
 $3 \times 4 \text{ cents} = 12 \text{ cents}.$

And so on until the rest of this table is developed in a similar manner. The children will like to play candy store, toy store, etc.

LESSON DESCRIPTION

The writer saw an effective drill in grade seven, using three formulas as a starting point:

I _____ now.

I _____ yesterday.

I have _____

The pupils were required to vary the subject and put appropriate forms of certain verbs in the blanks such as:

Mother has lain on the sofa all day.

She lay on the sofa yesterday.

The book lies on the table now.

The book has lain on the table all day.

Mary eats heartily now.

She ate heartily yesterday.

She has just eaten dinner.

Such a drill is very profitable in the sixth and seventh grades if the teacher is resourceful in varying the forms. Drill unremittingly on the "demon" verbs.

Game for teaching use of "Saw"

Place a number of objects on the teacher's desk. Have a row of children pass the desk and tell what they saw. Limit them as to the number of objects by saying:

You may tell two objects.

You may tell three objects.

The next child may tell four objects.

Look out for the careful placing of *and*.

I saw a cap and a ball.

I saw a cap, a knife and a book.

I saw a book, a marble, a top and a ball.
In like manner treat:

take	bring	found
find	took	brought

QUESTIONS

1. What are the elements of a good lesson plan?
2. What is the difference between organization of subject-matter and lesson plans?
3. What are the values of lesson plans?
4. Why should we not use old lesson plans, instead of troubling to devise new ones?
5. Select some topic in geography, find a problem in connection with it, and then work out an appropriate lesson plan.
6. Select some topic in history, find a problem in connection with it, and then work out an appropriate lesson plan.
7. Select some topic in English and then work out a detailed lesson plan.
8. What would you do first in planning a lesson on habit-formation?
9. How would you plan a lesson of the appreciative type? What are the important principles involved in such a lesson?
10. Is plan-making worth the effort it requires? Justify your answer.

REFERENCES

- Strayer: *Brief Course in the Teaching Process*, Chapter XVI. Macmillan Co., New York.
- Earhart: *Types of Teaching*, Chapter XV. Houghton Mifflin Co., Boston.
- Burton: *Supervision and the Improvement of Teaching*, Chapter XVIII. D. Appleton & Co., New York.
- McMurry: *The Method of the Recitation*, Chapter XIV. Macmillan Co., New York.
- Charters: *Methods of Teaching*, Chapter XXV. Row, Peterson & Co., Chicago.

APPENDIX

SUGGESTIVE DAILY SCHEDULE FOR ONE-TEACHER SCHOOLS

Hour	No. Min.	Recitations Program	Group I. Grade 1	Group II. Grades 2 and 3
9:00	15	Opening Exercises, School songs, Bible readings, current events.		
9:15	15	Reading-Eng- lish 1	Projects	Silent Reading for some urpose
9:30	15	Reading 2		Grade 3—Study reading
9:45	15	Reading 3	Projects or play	Grade 2—Projects
10:00	20	Reading-Eng- lish 4	Projects or play	Nature Study History projects
10:20	15	Penmanship in all grades three times per week. Hygiene twice.		
10:35	10	Recess for all grades. Supervise the play		
10:45	15	Reading 1	Projects in number work	Arithmetic
11:00	20	Reading-Eng- lish 5		Arithmetic
11:20	10	Arithmetic 2 and 3	Play	.
11:30	10	Spelling 6 and 7	Board work	Copy English sentences or study spelling
11:40	10	Spelling 2 and 3	Board work	
11:50	10	Spelling 4 and 5	Look at picture books	Read storybooks or practice drawing
12:00	60	Recess for all. Make the hour a happy one		
1:00	20	Arithmetic 4 and 5	Dismissed	Projects
1:20	20	Civics and Hygiene 6 and 7	Dismissed	Projects
1:40	20	English 2 and 3		
2:00	20	Geography-His- tory—6th Grade		Drawing
2:20	10	Geography History 4		Drawing
2:30	10	Recess for all the school.		
2:40	20	Reading-Eng- lish 7		Dismissal
3:00	15	Reading-Eng- lish 6		
3:15	20	History- Geography 7		
3:35	25	Arithmetic 6 and 7		

This schedule and those which follow (referred to on page 137) were worked out at the Radford (Va.) State Teachers College.

Group III. Grades 4 and 5	Group IV. Grades 6 and 7	General Suggestions
Arithmetic	Arithmetic	Take time to make assignments for study groups
Arithmetic	Arithmetic	
Language projects or Reading for some purpose Grade 5—Reading	Silent Reading to solve some problem English-Reading Writing compositions	Let all Silent Reading be for some purpose In English work for free, spontaneous expression
Work on some Geography project or problem Work on some Geography project or problem Written English work	Composition Spelling Teach use of dictionary Study spelling	In English teach children to gather material and organize it Work on charts, posters, etc. Correlate play and story
Study Spelling Teach use of dictionary Study Spelling	Practice writing Practice writing	
		Supervise Lunch—15 minutes
Study Geography History	Study hygiene and civics	Assemble with music Hygiene three times per week, Civics twice. Cor- relate the two subjects Organize your Geography and History into projects and problems
Read history stories	Silent Reading to solve some problem	
Reading history to answer questions	Map work Map work	
Writing compositions	6th Grade—English	Emphasize oral and writ- ten composition
Writing compositions	7th Grade—History	
Practice writing	Arithmetic 6	Drawing and Nature Study should be taught in connection with English, History and Geography
Practice writing		

PROGRAM OF A ONE-TEACHER SCHOOL

Begin	Min.	Recitations	A—Grade 1	B—Gr. 2 & 3	C—Gr. 4 & 5	D—Gr. 6 & 7
9:00	15	Opening Exercises				
9:15	15	Reading A	READING	Study Arith.	Study Arith.	Read papers & magazines
9:30	20	Arith. B	Study Reading	ARITH.	Study Arith.	Study Gram. & Comp.
9:50	20	Arith. C	Build words	Arith. seat work	ARITH.	Study Gram. & Comp.
10:10	20	Sp. & Eng. D	Build sentences	Study Spell.	Read Geog. readers	*GR. till X. SP. COM. af.
10:30	10	Phon. & Sp.	PHON. & SPELL.	Write	History stories	Read library books
10:40	10	Recess				
10:50	15	Sp. & Phon.	Phonics: seat work	SP. 3 and PHON. 2	Study Geog. or Hyg.	Study Hist. or Reading
11:05	10	Numbers A	NUMBERS	Phonics, Seat Work	Study Geog. or Hyg.	Study Hist. or Reading
11:15	20	Hyg. or Geog. C	Numb. with objects	Study Lang.	*HYG. till X. GEOG. after	Study Hist. or Reading
11:35	20	Hist. D	Written Numbers	Read library books	Sand table or map making	READ till X. HIST. after
11:55	10	Music—All classes				
12:05	50	Dinner				
12:55	15	Reading A	READING	Study Reading	Study Spell. & English	Study Geog. Phys. or Ag.
1:10	15	Lang. B	Illus. Read. paper cut.	LANGUAGE	Study Spell. & English	Study Geog. Phys. or Ag.
1:25	20	Spelling and English C	Illus. Read.	Write or illus Language	SPELL. & ENG.	Study Geog. Phys. or Ag.
1:45	15	Reading II	Play	READ. Study Read.	Write Comp.	Junior Red Cr. work
2:00	20	Phys. or Geog. D	Study Reading	Illus. Read. Red Cross	Red Cross work	*PHYS. or AG. till X. GEOG. after
2:20	20	Writing 2, Drawing and Industrial Work 3				
2:40	10	Recess				
2:50	15	Lang. or Nat St. I, II, III	LANG. 2 NAT. ST. 2	LANG 2, HW NAT. ST. 3	Study Hist. or Reading	Study Arith.
3:05	15	Reading III	Dismissed	READ.	Study Hist. or Reading	Study Arith.
3:20	20	Reading or History C		Dismissed	*READ. or READ till X. HIST. after	Read Geog. readers
3:40	20	Arith. D			Read lib. bk.	ARITH.

*See note at bottom of opposite page. "X" stands for "Christmas."

PROGRAM OF PRIMARY TEACHER OF A TWO-TEACHER SCHOOL

			A	B
BEGIN	MIN.	RECITATIONS	GRADE 1	GRADE 2 GRADE 3
9:00	15	OPENING EXERCISES		
9:15	15	Read. I	READ.	Study: Read. II, Read. III
9:30	15	Read. II, III	Study Read.	READING
9:45	15	Numbers I	NUMBERS	Illus. Read. Read. Library
10:00	15	Nature Study		
10:15	15	Read. III	Numbers with objects Write numbers	Study. Arith. READ.
10:30	15	Writing		
10:45	15	Recess—Games		
11:00	10	Phonics I	PHONICS	Study Arithmetic
11:10	15	Arith. II	Illustrate reading by paper-cutting, etc.	ARITH. Study Arith.
11:25	15	Arith. III	Illustrate reading	Arith. seat work ARITH.
11:40	10	Songs		
11:50	10	Phonics I, II	PHONICS	PHONICS Study Ph. & Sp.
12:00	15	Sp. & Phon. III	Phon. seat work	Study Lang. SP. & PHON.
12:15	50	Noon Recess—Games		
1:05	20	Lang. I, II	LANG.	LANG. Study Lang.
1:25	20	Lang. II, III	Build wds., sentences	LANGUAGE
1:45	20	Industrial Work		
2:05	15	Read. I	READING	Study Read. Write Lang.
2:20	15	Read. II	Play	READ. Red Cross Work
2:35	15	Recess—Games		
2:50	20	Geog. III		Study Spell. GEOG.
3:10	15	Spell. II		SPELL. Sand Table
3:25	20	Hyg. IV, V, 4 da.		

*[Note for page 198] In column C at 11:15 A. M. hygiene and geography may be alternated by days. At 3:20 P. M. reading daily in even-numbered years, in odd-numbered years alternating with history. In column D at 10:10 A. M. grammar and composition may alternate by days. At 2:00 P. M. in even-numbered years geography alternates with physiology, in odd numbered with agriculture.

PROGRAM FOR GRAMMAR GRADES OF A TWO-TEACHER SCHOOL

			C		D	
BEGIN	MIN.	RECITATIONS	GRADE 4	GRADE 5	GRADE 6	GRADE 7
9:00	15	Opening Exercises				
9:15	30	Sp., & Gram. 2 Comp. 3	Study Arith.		*SP. & GRAM. 2 COMP. 3	
9:45	20	Arith. IV	ARITH. 3	Read Hist. Sto. Study Spell, 2	Study Hist.	
10:05	20	Arith. V	Read Lib. 3 Study Sp. 2	ARITH.	Study Hist.	
10:25	20	Hist. C 3 Spell. C 2	HIST. OR SPELL.		Study Eng. Read news- papers or magazines	
10:45	15	Recess—Games				
11:00	30	Hist. D	Study Geog.		HISTORY	
11:30	30	Geog. C	GEOGRAPHY		Study Read. 2 Read Geog. Read. 3 Study Civ. 3	
12:00	15	Music 3—Writing 2				
12:15	50	Noon Recess—Games				
1:05	20	Read. D 2			READING 2	
		Civics VII	Study. Sp. and Eng.		Read in Lib. 3 Civics 3	
1:25	30	Sp. and Eng. C	SPELLING & ENGLISH		Study Phys. or Ag. or Geog	
1:55	30	Phys. or Ag. or Geog. D	Study Reading 4 Red Cross Work Friday		PHYS. till Xmas, even yr. AG. till Xmas, odd year GEOG. after Xmas, both years	
2:25	10	Read to Children				
2:35	15	Recess—Games				
2:50	20	Read. C 4 Ind. Wk. Fri.	INDUS. WORK Friday READING 4		INDUS. WORK Friday Study Arith. 4	
3:10	30	Arith. D 4 Ind. Wk. Fri.	*Study Hygiene 4 INDUS. WORK Friday		ARITH. 4 INDUS. WORK Friday	
3:40	15	Missed Les. 4 Ind. Wk. Fri.	Missed Lessons 4 INDUS. WORK Friday		Missed Lessons 4 INDUS. WORK Friday	

*Column C, 3:10 P. M. Class C recites Hygiene in Primary Room 3:30 P. M. every day, except Friday. Column D, 9:15 A. M. Teach Grammar in connection with Composition. Composition three days and Grammar two days would be a good arrangement. Either this or Arithmetic must be prepared at home.

**PROGRAM OF PRIMARY GRADES OF A THREE-
TEACHER ELEMENTARY SCHOOL**

BEGIN	MIN.	RECITATIONS	GRADE 1	GRADE 2	GRADE 3
9:00	15	Opening Exercises			
9:15	15	Read. I	READ.	Study Read.	
9:30	15	Read. II	Study Read.	READ.	
9:45	15	Phonics I	PHONICS	Study Arith.	
10:00	15	NATURE STUDY			
10:15	20	Lang. I, II	LANGUAGE		
10:35	15	Recess—Games			
10:50	15	Numbers I	NUMBERS	Language Seat Work	
11:05	20	Arith. II	Numb. with obj. Write numbers	ARITH.	
11:25	15	Read. I	READ.	Arithmetic Seat Work	
11:40	20	INDUSTRIAL WORK			
12:00	60	Noon Recess—Games			
1:00	15	Spell. III		Study Spell.	SPELL.
1:15	15	Spell. II		SPELL.	Study Read.
1:30	15	Writing II		WRITING	Study Read.
1:45	10	Songs II, III		SONGS	
1:55	20	Read. III		Read in Library	READ.
2:15	15	Read. II		READ.	Study Geog. sand tab.
2:30	15	Recess—Games			
2:45	15	Phon. II, III		PHONICS	
3:00	20	Geog. III		Illustrate Reading	GEOG.
3:20	15	Tell or read stories		* STORIES	

The third grade, which sits in the intermediate room, comes into the primary room at 9:55 for Nature Study and again at 11:40 for Industrial Work, after which it remains in the primary room for the rest of the day.

**PROGRAM FOR INTERMEDIATE GRADES OF A THREE-TEACHER
ELEMENTARY SCHOOL**

BEGIN	MIN.	RECITATIONS	GRADE 3	GRADE 4	GRADE 5
9:00	15	Opening Exercises			
9:15	20	Arith. III	ARITH.	Study Arith.	Read History stories
9:35	20	Arith. V	Study Lang.	Study Lang.	ARITH.
9:55	20	Arith. IV	NATURE STUDY (Pri. Room)	ARITH.	Study Hygiene
10:15	20	Hist. IV, V 3 Writ. III, IV, V	Prac. Writ. 3 WRITING	HIST. 3 WRITING 2	HIST. 3 WRITING 2
10:35	15	Recess—Games			
10:50	25	Lang. III	LANGUAGE	Study Geog.	Study Geog.
11:15	30	Geog. IV, V	Study Spelling	GEOGRAPHY	
11:45	15	Music 3 Spelling 2	IND. WORK (Pri. Room)	MUSIC 3, SPELLING 2	
12:00	60	Noon Recess—Games			
1:00	30	Language IV		LANGUAGE	Study Lang.
1:30	30	Language V		Study Hygiene	LANG
2:00	20	Hygiene IV, V		HYGIENE	
2:20	10	Read to Children		STORIES	
2:30	15	Recess—Games			
2:45	20	Read. V 4 Ind. Work Friday		Study Reading	READ. 4 IND. WK. Friday
3:05	20	Read IV 4 Ind. Work Friday		READ.	Study Read.
3:25	30	Detention 4 Ind. Work Friday		INDUS. WORK Friday	

Third grade arithmetic, fifth grade arithmetic, fourth and fifth grade spelling will need to be prepared at home. Also most of the library reading will have to be done out of school.

The third grade have their regular seats in the intermediate room, but go to the primary room at 9:55 for nature study and again at 11:40 for industrial work, after which they remain in the primary room for the rest of the day.

**PROGRAM FOR SIXTH AND SEVENTH GRADES OF A THREE-
TEACHER ELEMENTARY SCHOOL**

BEGIN	MIN.	RECITATIONS	GRADE 6	GRADE 7
9:00	15	Opening Exercises		
9:15	40	Grammar VII 2 Spell. & Comp. 3	Study Spelling & Gram. or Comp.	GRAMMAR 2 SPELL. & COMP. 3
9:55	40	Grammar VI 2 Spell. & Comp. 3	GRAMMAR 2 SPELL. & COMP. 3	Study History 4 Read. in Library 1
10:35	15	Recess—Games		
10:50	30	Cur. Events Mon. History VII 4	Study Reading Mon. Study History 4	CURRENT EVENTS Mon. HISTORY 4
11:20	25	Cur. Events Mon. History VI 4	CUR. EVENTS Mon. HISTORY 4	Study Reading or Civics
11:45	15	Music 3, Reading to Children 2		
12:00	60	Noon Recess—Games		
1:00	30	Read. VI, VII 2 Civics VII 3	READ 2 Read. Geog. Readers 3	READING or CIVICS
1:30	30	Ag. or Geog. VII	Study Phys. or Geog.	AG. fall and spring, GEOG. in winter
2:00	30	Phys. or Geog. VI	PHYS. till Xmas GEOG. after	Study Arith. 4
2:30	15	Recess—Games		
2:45	30	Arith. VII 4 Ind. Work Fri.	Study Arith. 4 IND. WORK Friday	ARITH. 4 INDUS. WORK Friday
3:15	30	Arith. VI 4 Ind. Work Fri.	ARITH. 4 INDUS. WORK Friday	Study Ag. or Geog. 4 INDUS. WORK Friday
3:45	15	Detention 4 Ind. Work Fri.	INDUS. WORK Friday	INDUS. WORK Friday

Seventh grade English and spelling, and sixth grade reading on one day will need to be prepared out of school and most of the library reading will have to be done out of school hours.

INDEX

- Ability of pupils, 112
- Achievement:
 - age, 10
 - comparative, 13
 - level of, 92
- Activity, pupil and teacher. *See*
Pupil; Teacher
- Aim:
 - conscious, 27
 - teacher's and pupil's, 34, 43, 54, 57, 88, 89, 166, 169, 172, 178, 179, 180, 182, 183, 185, 191
- Alertness, mental, 18, 119
- Analysis, judgment based on, 11
- "And" habit, 45
- "Angelus, The," 33, 116, 125, 165
- Appreciation, 33, 172, 183, 191
- Assignment, 33, 42, 54, 57
- effective, 18, 32, 38, 40, 49, 110
 - characteristics of, 113, 147
 - prerequisites of, 112
- form of, 113
- illustrations of, 114, 126
- motivation of, 114
- spelling, 116, 185
- Attention, 138
 - percentage of, 18, 40
 - spontaneous, 29, 47
- Attitudes, development of, 11, 122, 148
- Audience situation, 58
- Authority of teacher, 135
- Autocratic recitation, 148
- Autocratic school government, 136
- Avent, Joseph E., 12, 138, 185
- Average score, 101
- Ayres, Leonard P., 93
- Bagley, William C., 136, 138
- Balance between teacher and
pupil participation, 24, 148
- "Barefoot Boy, The," 172
- Behavior:
 - definite, 38
 - desirable, 28
- Betts, George Herbert, 78, 85
- Biography, 57
- Bowers, W. R., 193
- Boy Scout movement, 129
- "Boy's Song, A," 191
- Buckingham, B. R., 93
- Case, history of difficult, 10
- Chicago, University of, 11, 13, 124, 150, 153
- "Children should be seen, not
heard," comment on, 26
- Citizenship, lesson in, 169
- Classification of pupils, 13
- Column diagram, 107
- Community as basis for prob-
lems, 115
- Compositions:
 - as models, 33
 - on Boy Scout movement, 129
 - on malaria, 54
 - on "The Angelus," 37
 - oral, correlated with social
subject, 114
- Comprehension, 98
- Compulsion, 38
- Conclusions drawn by pupils, 11, 128, 131
- Consideration for others, 18
- Control by teacher, 134
- Cooperation:
 - of parents, 139
 - of pupils, 18, 135
- Coppedge, M. E., 183
- Correction, 105
- Correlation, 54, 114, 172
- County projects, 54, 57, 125
- County School Fair, 55, 57
- Curtis Silent Reading Test, 13, 82, 98
- Criticism of recitations, 157
- Deafness, 139
- Democratic ideals, 169
- Democratic recitation, 148
- Democratic school government, 136
- Demons, spelling, 94

- Desires, developing proper, 11
- Details, fullness of, 27
- Diagrams, 107
- Dictation, when necessary, 30
- Discipline, maintaining, 18, 134
- Distribution of scores:
 - frequency, 103
 - simple, 98
- Drama, story of Joseph as, 120
- Dream as a composition subject, 41, 116
- Drill, 81, 97, 158
- Earhart, Lida Belle, 125, 131, 161, 166
- Education, democratic, 52
- Efficiency of teaching, 9, 12, 24
- Emotion in discipline, 136
- Engelhardt, N. L., 64
- Enthusiasm, 138
- Esprit de corps, 136
- Essentials:
 - and non-essentials, 81
 - selection and emphasis of, 18
- Failure, causes of:
 - among Normal graduates, 134
 - in pupils, 10
- "False or true" tests, 78
- Farm project, 50
- Fear, 29
- First grade language lesson, 178
- Force, use of, 140, 143
- Form for lesson plan, 165
- Formulas, efficiency, 11
- Fourth grade language lesson, 158
- Fourth-sum, 106
- Fredericksburg State Teachers College, 130
- Frequency distribution, 103
- Fundamentals, 82
- Generalizations, 11, 122
- Geography, problem method applied to, 67, 162
- Gettysburg Address, 179
- Goal of the recitation, 122
- Good Samaritan, The, 85
- Grading, 79, 83, 101
- Graphs, 106
- Gray, W. S., 13
- Group loyalty, 18
- Habit:
 - "and," 45
 - development of, 122
 - language, 45
 - of organizing material, 128
 - problem-solving, 125
 - study, 18, 123, 147
- Half-sum, 105
- Health, project in, 54
- History, problem method applied to, 71
- Hogg, James, 191
- Horne, J. F., 49
- House building as a project, 50
- Hypotheses, workable, 127
- Ideals:
 - democratic, 169
 - developing proper, 11
- Illiteracy as a problem, 126
- Incentives, artificial, 29
- Independence:
 - in pupils, 11, 18, 40, 90, 147
 - in questioning, 85
- Initiative:
 - pupil's, 11, 18, 40, 47, 110, 147
 - teacher's, 51
- Instruction, observation of, 148.
See Recitation
- Intelligence quotient, 10
- Interest:
 - deepening of, 122
 - pupil as center of, 25
 - self-initiated, 18, 29, 40, 46, 60, 147
 - teacher as center of, 24
- Interpretation, 179
- Interval of a scale, 103, 105
- Jefferson, Thomas, 75
- Jones, W. F., 94
- Joseph:
 - dreams of, 88
 - story of, 111
 - as a drama, 120
- Judd, C. H., 108
- Judgment:
 - based on analysis, 11
 - based on measured results, 13
 - based on observation, 9
 - elimination of, 82
 - pupil's, 11, 128
- Kilpatrick, William H., 49
- Kindness:
 - as an assignment, 114
 - lesson on, 169
 - rule by, 143
- Knowledge of pupils, 112
- Language:
 - habits, 45
 - lesson, 158, 178, 194
- Lanier, Sidney, 183

Lesson:

- language, 153, 178, 194
- multiplication, 193
- on King Arthur's Knights, 25
- oral reading, 172, 183, 191
- planning a, 33, 161
- plans, 18, 161, 169
- silent reading, 172, 179, 187
- spelling, 182, 185
- type, 32

Lincoln, Abraham, 57, 179

Love, 139

Lowell, James Russell, 187

Lower fourth, 13, 92, 101, 103

Lower quartile, 103, 106

Lynchburg reading test, 98, 102

Lynchburg spelling test, 94

McGee, Mrs. Marianna, 187

McMurry, Charles A., 50, 78, 87, 121, 137

McMurry, Frank M., 11, 24, 128

Malaria, 54

Mann, C. R., 51

Marks, 29

Material:

- concrete, 51, 52
- organizing, 128
- relevancy of, 65, 75, 128
- value of, 75, 128

Measured results:

- from using standard tests, 21
- judgment based on, 13

Median:

- achievement, 13
- approximate, 105
- class, 92
- score, 101
- standard, 92
- true, 105

Mental age, 10

Method:

- of grading, 79, 83
- problem, 30, 64
- problems in, 153
- project, 30
- topic, 71

Middle fifty per cent, 13, 92, 103

Millet, Jean Francois, 35

Models, compositions as, 33

Monroe, W. S., 100

Morrison, H. C., 11

Mosquito, Anopheles, 56

"Mother," recitation on, 114

Motivation, 33, 42, 55, 58, 75

—effectiveness of, 18, 28, 32, 40, 46, 49

Motive, 11, 33, 38, 60

Multiplication, lesson on, 193

New England States, problem on, 67

New York City, 11, 24, 25, 128

Norsworthy, Naomi, 78, 88, 123

Obedience, 135

Objective, 75, 164

Observation:

—judgment based on, 9

—of instruction, 148

Opening exercises, 140

Oral reading:

—"A Boy's Song," 191

—"The Barefoot Boy," 172

—"The Song of the Chattahoochee," 183

Order, maintaining, 18, 134, 147

Organization:

—attention to, by pupils, 11

—of subject-matter, 18, 126

Originality, 11, 18, 40, 147

Page, D. P., 134, 135

Parents, cooperation of, 139

Parker, Samuel Chester, 64, 72

Partial sum, 105

Participation, pupil and teacher

See Pupil; Teacher

Performance of pupils, 129

Pictures as a basis for composition, 33

Play, program of, 137

Pleasure in doing, 28

Polygon graph, 107

Preparation:

—of pupils, 18, 118, 173, 180, 187

—of teacher, 138

Princess Anne County, 54, 57, 60

Principles:

—application of, 122

—guiding, 17

Prizes, 29

Problem, 18, 28, 30

—assignment in form of, 110, 113

—discovery of, 75, 126

—examples of, 65, 115, 126, 127, 162

—in lesson plan, 172

—method, 64

—practical, 51, 52

—solving of, 65

—worth-while, 162

Problems in method, 153

Program:

—daily, 136, 196

—of play, 137

Project:

—assignment in form of, 113

- building trenches, 29
- compositions on malaria, 54
- county, 54
- excursion, 130
- farm, 50
- house building, 50
- method, 30
- organization in form of, 18
- school bank, garden, paper, 50
- setting of a, 52
- Thanksgiving dinner, 119
- Punctuality, 140
- Punishment, corporal, 135
- Pupil:
 - activity, 17, 24, 49, 145, 148
 - aim. *See* Aim
 - attitude of, 148
 - backward, 97
 - knowledge of, 112
 - performance of, 129
 - preparation of, 18, 118, 173
 - responsibility, 148
- Purpose:
 - clearness and definiteness of, 18, 32
 - development of, in pupils, 11
 - teacher's, 147
- Quartiles, 103, 106
- Questioning:
 - effectiveness of, 18, 78
 - excellences in, 90
 - prerequisites of good, 85
 - warnings in, 90
- Questions:
 - basis for answering, 88
 - objective, 80
 - pivotal, 83, 90
 - thought-provoking, 25, 83, 90, 148, 164
 - “yes” and “no,” 82
- Quotient, intelligence, 10
- Radford State Teachers College, 33, 40, 134, 137, 157
- Range of distribution, 101
- Ranking:
 - of pupils, 82, 92
 - of standards, 19
 - scores, 102
- Rate:
 - of answering questions, 98
 - of reading, 98
- Rating:
 - by supervisor and superintendent, 148
 - self, 148
- Reading, 13, 14, 82, 98, 111, 172, 179, 183, 187, 191
- Recitation, 35, 54, 58
 - by the teacher, 25
 - criticism of, 157
 - evaluating the, 17, 24, 146
 - first step in, 111
 - goal of the, 122
 - on geography, 162
 - on “Mother,” 114
 - socialized, 119
 - spelling, 186
- Relationships, *see* seeing, 123
- Relevancy, 65, 75, 128
- Response:
 - accuracy and adequacy of, 18, 25, 148
 - desired, 165
 - individual, 90
 - situation and, 38, 61
 - that brings satisfaction, 28
- Responsibility, 26, 148
- Results:
 - expected, 34, 55, 58, 185
 - fixing definite, 13, 118
 - measured, 13, 21, 92
 - objective, 98
- Rewards, 29
- Routine, care of, 18, 118
- Rugg, Harold O., 64
- Rules, 138, 142
- Satisfaction, 28
- Scale, 13
 - reading, Thorndike-McCall, 14
 - spelling, Ayres and Buckingham, 93
- Schedule, daily, 136, 196
- Schemes for observation of instruction, 149
- School:
 - bank, garden, paper, 50
 - government, 136
- Scolding, 138
- Score card, 145
- Scores, distribution of, 98, 103
- Second grade spelling, 182
- Self-analysis, 147
- Self-control, 18
- Self-improvement, 147
- Self-rating, 147
- Self-reliance, 11, 18, 90, 147
- Sentence sense, 44, 59
- Seventh grade:
 - language drill, 194
 - oral reading lesson, 183
 - silent reading lesson, 179, 187
- Silent reading:
 - Courtis Test, 13, 82, 98
 - Gettysburg Address, 179
 - Lynchburg reading test, 98

Silent reading—(Continued):

- story of Joseph, 111
- "The Barefoot Boy," 172
- "The Vision of Sir Launfal," 187
- Thorndike-McCall Scale, 14
- Situation and response, 38, 61
- Sixth grade silent reading, 187
- Skill, 147
- Smoking on school grounds, 142
- Social activity, 18, 119
- Social issues, 60
- Socialized recitation, 119
- "Song of the Chattahoochee, The," 183

Spelling:

- assignment, 116, 185
- automatic, 97
- demons, 94
- lesson for fourth grade, 185
- lesson for second grade, 182
- tests, 93
- Standard tests, 13, 14, 21, 82, 92, 93, 98

Statement, 113

- Stephenson, J. A., 49
- Stevenson, Robert Louis, 178
- Strayer, G. D., 64, 78, 88, 123
- Stubbornness, 139

Study:

- first step in, 111
- habits, 18, 123
- nature of, 123
- Subjective procedure, 9
- Subject-matter, 35, 55, 58
- choice and validity of, 18, 28, 40, 46, 49, 60, 147, 162
- mastery of, 84, 87, 162
- organization of, 18, 49, 61, 64, 71, 84, 87, 147
- prerequisites of, 53
- Superintendent, rating by, 148
- Superior teachers, 14, 155
- Supervisor:
 - analysis by, 13
 - rating by, 148,
- "Swing, The," 178

Talking in school, 139

Tardiness, 140

Teacher:

- activity, 17, 24, 145, 148
- aim. *See* Aim
- as center of interest, 24
- as shadow member, 25, 30

- authority of, 135
- causes of failure, 134
- chief function of, 61
- control by, 134
- handicap, 153
- her own critic, 147
- knowledge of, 162
- superior, 14, 155
- uses definite questions, 81

Teaching:

- conscious aim in, 27
- efficiency of, 9, 12, 85
- emphasis, 81, 97
- guiding principles in, 17
- things to avoid in, 156
- Teamwork, 119, 148

Tests:

- Courtis Reading, 13, 82, 98
- "false or true," 78
- spelling, 93
- standard, 13, 14, 21, 82, 92, 98
- Thorndike-McCall Scale, 14
- Thanksgiving dinner project, 119
- Third grade oral reading, 191
- Thorndike-McCall Scale, 14
- Thought-provoking questions, 25, 83, 148, 164

Threatening, 138

Three-fourths-sum, 106

Time element, 119

Topic method, 71

Training of pupils, 112

Truancy, 141

Type:

- appreciation, 172, 183, 191
- assignment in form of, 113
- interpretation, 179
- lesson, 32

Upper fourth, 13, 92, 101, 103

Upper quartile, 103, 106

Values, weighing, 11, 18, 128

- Virginia State Course of Study, 32, 40, 54, 57, 169, 172, 178, 179, 182, 183, 187, 191
- "Vision of Sir Launfal, The," 187

Washington, George, 71

Weakness and kindness, 143

White, Emerson E., 24

Whittier, John Greenleaf, 172

"Yes" and "no" questions, 82

